





Global Overview and Success

Allied Telesyn is one of the world's leading networking organisations who provide connectivity and infrastructure solutions for organisations of all sizes. Founded on the premise that there existed a need for simple, yet reliable, standards-based networking products, Allied Telesyn provides a complete range of networking solutions that is unrivalled within the industry today.

Allied Telesyn's recent move into providing enterprise networking solutions for organisations has allowed the company to gain ground on more established vendors in the areas of managed Layer 2 and Layer 3 switches, and the company's focus and development in these areas are the reason that many customers are making the transition to Allied Telesyn solutions. Current records show that more than one million customers worldwide have chosen Allied Telesyn technology for their networks. These customers have acquired their products through leading distributors, solution providers, retail marketers or the qualified Allied Telesyn Partner channel.

New products featured in this issue

AT-8012M-QS	Layer 2 Managed Stackable Fast Ethernet Switch	AT-FS7009E	Smart Switch 1st Generation
8500 Series	Layer 2+ Managed Fast Ethernet Switches	AT-FS7109/GB	Smart Switch 2nd Generation
AT-8624T/2M	Affordable Layer 3 Fast Ethernet Switch	AT-GS924GB	Layer 2 Unmanaged Gigabit Switch
AT-8648T/2SP	Affordable Layer 3 Fast Ethernet Switch	AT-LX3800	LightExplorer Optical Transport Platform
AT9424T/GB	Layer 2+ Managed Gigabit Ethernet Switch	WaveGlider Series	WaveGlider Passive CWDM Platform
AT-9424T/SP	Layer 2+ Managed Gigabit Ethernet Switch	AT-RG644A	Residential Gateway
AT-9724TS	Layer 3 Stackable Gigabit Ethernet Switch	AT-RG644B	Residential Gateway
AT-9924T	Multi-layer Gigabit Switch	AT-RG656BD	Residential Gateway
AT-9924SP	Multi-layer Gigabit Switch	AT-SB4541A	10 Gigabit Ethernet Line Card
AT-9924T/4SP	Multi-layer Gigabit Switch	AT-Upgrade Manager	Network Device Management Software
AT-AR440S	Branch Office Router	AT-WA1004G	SOHO Wireless Access Point
AT-AR441S	Branch Office Router	AT-WC200G	Wireless Card Bus Adapter
AT-AR442S	Branch Office Router	AT-WCP200G	Wireless PCI Adapter

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I Core Switching with SwitchBlade

Multi-layer Modular Switches

The SwitchBlade SB4100 series, with its versatile modular chassis, is ideal for multiple tenant unit and central point aggregation for Metro Area Networks (MAN) and campus networks, and as an enterprise mid-tier aggregation device. Thanks to very sophisticated multicast and Quality of Service features the SB4100 series also fits perfectly into education and government networks requiring separation of multicast traffic. In addition it provides the perfect solution for utility companies that need to control and monitor their infrastructure, but also wish to offer multimedia services like Voice, Data, Video and Web-Browsing using the same network structure.

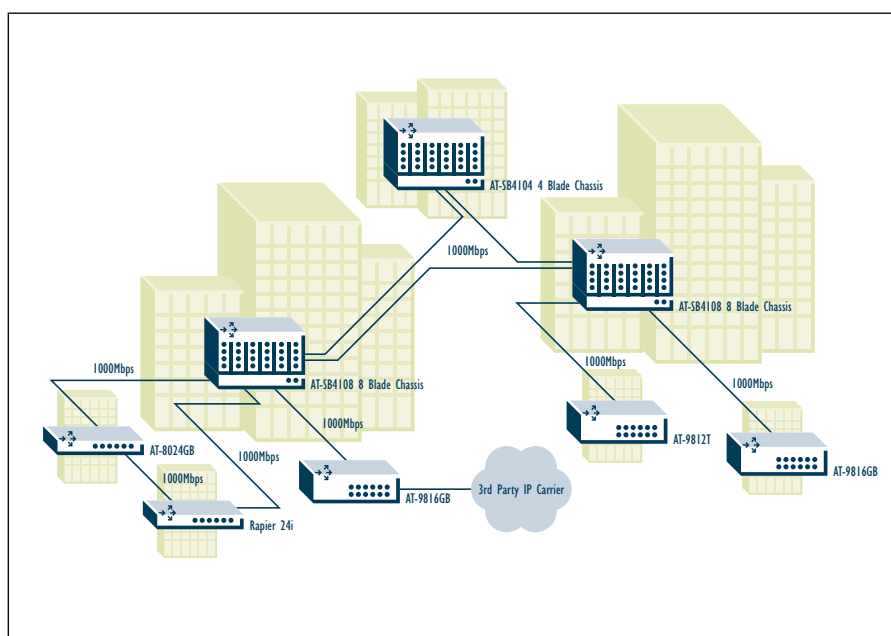
The SB4100 series combines hardware-based, wirespeed, non-blocking switching and IP/IPX routing with advanced, flexible Policy-Based Quality of Service, rich multicast support, and a comprehensive set of configuration and control features designed to simplify administration and maintenance tasks. The SB4100 series delivers hardware-based switching for Layer 2, Layer 3, and Layer 4+ with no performance penalty in a wide variety of interface types and feature options.

Example:

SB4100 Series in a MAN or Campus Network Setting

In the scenario shown, a Metropolitan Ethernet Provider (MEP) is provisioning an Ethernet service to a number of Multi-Tenant Unit (MTU) complexes. Each complex owner is providing tenants with voice and data services and requires 1000Mbps feeds to each building and rate limited Ethernet service to each tenant. An Allied Telesyn SB4100 series chassis-based switch forms the network backbone in each of the larger MTU complexes, with smaller standalone Layer 3 Gigabit Ethernet switches providing the aggregation from smaller complex buildings.

Also part of the solution, are Allied Telesyn IEEE 802.11b wireless solutions for network access, media converters for riser and cross-building connectivity and Layer 2 switches for LAN aggregation.



SwitchBlade Multi-layer Modular Switches



Features & Benefits

POWER

Up to 128Gbps of full wirespeed, non-blocking Layer 3, Layer 4+, Filtering and QoS at wirespeed.

CONTROL

Industry leading QoS features with independent bandwidth and latency control allow multi-faceted tuning of network traffic.

FLEXIBILITY

SB4100 series modular design delivers both reliability and scalability. Line cards offering Fast Ethernet and Gigabit Ethernet (with copper and fibre interface options) can be added or removed to meet growing or changing network requirements.

MULTI-PROTOCOL

Wirespeed IP, Multicast IP and IPX are complimented with advanced IPv6 and AppleTalk for full multi-protocol capability. Standards-based enhanced VRRP, IEEE 802.1w, QoS, and Multicast support ensure interoperability with any similar standards-based products.

PORT DENSITY

- Up to 256 x 100FX port
- Up to 384 x 10/100TX port
- Up to 64 x 1000X port
- Up to 192 x 10/100/1000T port *

REDUNDANCY

Uninterrupted performance is ensured through a wide range of redundancy mechanisms and hotswap capability on all cards and modules.

EASY TO CONFIGURE

The intuitive and customer friendly GUI interface allows even the most complex of configurations to be achieved easily.

MANAGEMENT FACILITIES

A broad range of SNMP-based management options, allows the user to efficiently and securely access the SB4100 series powerful networking capabilities.

WIDE SUPPORT

Part of a huge family of compatible networking products complimenting all Allied Telesyn network products, providing unbeatable performance and connectivity backed by worldwide technical support network.

SECURITY

Functions of SSL and SSH are provided. Stateful Inspection Firewall, SMTP Proxy and HTTP Proxy are optional.

Power Supply

- Power load sharing
- IEC inlets in rear
- 110-240V AC auto-ranging
- Chassis can be converted in the field from AC to DC
- -48VDC

**Two Year Warranty + 1 Year Net.Cover®
Basic Plus Support Program**

Model	Dimensions	Weight
AT-SB4108	62cm x 44cm x 34cm	63.6kg
AT-SB4104	40cm x 44cm x 34cm	36.1kg

* Check with your sales representative for availability

Hardware Features/Ordering Information

8 SLOT OR 4 SLOT CHASSIS CONFIGURATION

	Height	PSU	Switch Controller	10/100TX Max Port	100FX Max Port	1000X Max Port	1000 Max GBIC Port	10/100/1000T
8 slot AT-SB4108	15U	2+1 RPS	Switch Controller only	384 RJ45	256 MT-RJ	64 (SX/LX) SC/MT-RJ	64 (SX, LX, LX25, LX40, LX70)	192 RJ45
4 slot AT-SB4104	9U	1+1 RPS	Switch Controller Bandwidth Expander	192 RJ45	128 MT-RJ	32 (SX/LX) SC/MT-RJ	32 (SX, LX, LX25, LX40, LX70)	96 RJ45

SwitchBlade



Our comprehensive service and support plans designed to protect your network investments well into the future.

See pgs 62-66 for details

SwitchBlade Multi-layer Modular Switches



Features

Standard features include all the features typically required by Enterprise, Education or Government environments

Layer 2

- IEEE 802.1Q, 802.1p, 4096 VLANs
- Port security (MAC inspection)
- Link Aggregation
- GVRP
- IEEE 802.1d and 802.1w (Rapid Spanning Tree)
- IGMP snooping
- Protocol-based VLAN
- MAC address VLAN
- SubNet-based VLAN

Layer 3

- Generic Attribute Registration Protocol (GARP)
- General packet classifier
- Quality of Service
- Point-to-Point Protocol (PPP)
- Internet Protocol (IP)
- IP multicasting
- Open Shortest Path First (OSPF)
- Compression services
- Test facility
- Network Time Protocol (NTP)
- Generic Routing Encapsulation (GRE)
- Trigger facility
- IGMP processing
- ISAKMP
- Logging facility

- Scripting
- Dynamic Host Configuration Protocol (DHCP)
- Layer 2 Tunneling Protocol (L2TP)
- Simple Network Management Protocol (SNMP)
- Link compression
- IP Security (IPSec) - (future)
- Secure sockets layer
- SSH
- HTTP server
- HTTP client
- TFTP client

Advanced Software Bundle

The advanced software bundle offers the following features

Full Layer 3 option

- AppleTalk
- RSVP
- DVMRP
- PIM-DM
- PIM-SM

Advanced Layer 3

- IPv6
- BGP4
- OSI (IS-IS)
- Loadbalancing

Security pack

- Stateful Inspection Firewall
- SMTP proxy
- HTTP proxy

Switch Controller

AT-SB4211

- Switch Controller
- Hotswap switch controllers
- 128Gbps (full-duplex) Layer 2, 3, 4 wire-speed forwarding/routing engine with 2 switch controllers
- The default Layer 3 address table is 104,000 entries, option available increases default to 232,000 entries
- Management ports: 10/100TX RJ45 and 1 x Async config with RS232 DB9 connector
- CPU core system: A high-end PowerPC RISC CPU 512KB of non volatile SRAM (NVRAM)

Two Year Warranty + 1 Year Net.Cover®
Basic Plus Support Program

Bandwidth Expander

AT-SB4215

The Bandwidth Expander option for the AT-SB4104 chassis can be installed when a low cost solution is mandatory and non-blocking performance is required, but CPU redundancy is not necessary. The Expander fits into the second switch controller slot in the AT-SB4104 chassis.

- Only for use with 4 slot chassis AT-SB4104
- 1 x BW Expander max when used with 1 Switch Controller

Two Year Warranty + 1 Year Net.Cover®
Basic Plus Support Program

Memory Card

AT-SB4261-00 Switch CAM Memory
(AT-SB4211A only)

AT-SB4262-00 Line CAM Memory
(AT-SB44xxA only)

Line Cards

- Hotswap capable
- 8 per chassis in AT-SB4108 or 4 per chassis in AT-SB4104
- 16MB packet buffer for traffic bursting absorption

AT-SB4311 10/100TX x 48 ports

AT-SB4352 100FX (MT-RJ) x 32 ports

AT-SB4411A 10/100/1000T (RJ45) x 8 ports

AT-SB4412 10/100/1000T (RJ45) x 24 ports

AT-SB4451A 1000SX (SC) x 8 ports

AT-SB4452A 1000SX (MT-RJ) x 8 ports

AT-SB4441A 1000 GBIC x 8 slots

AT-SB4461A 1000LX (SC) x 8 slots

AT-SB4462A 1000LX (MT-RJ) x 8 slots

AT-SB4541A 10GBASE-R x 1 port

Power Supplies

AT-SB4161-30 AC PSU for UK

AT-SB4161-50 AC PSU for UE

AT-SB4161-80 DC PSE -48V

SwitchBlade Blade Cards & Modules



AT-SB4211A

Switch Controller

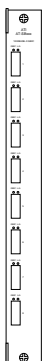
- Status LEDs
- Ethernet port
- Terminal console port



AT-SB4411A

Gigabit Ethernet Line Card

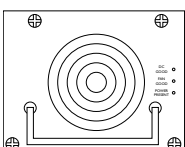
- 8 x 10/100/1000T ports
- RJ45 connectors with LEDs
- Optional CAM memory AT-SB4261



AT-SB4441A

GBIC Line Card

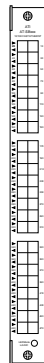
- 8 x 1000 GBIC ports
- RJ45 connectors with LEDs
- Optional CAM memory AT-SB4262



AT-SB4161

Power Supply Unit

- Status LEDs



AT-SB4311

Fast Ethernet Line Card

- 48 x 10/100TX ports
- RJ45 connectors with LEDs



AT-SB4215

Bandwidth Expander

- For use in slot B of the AT-SB4104 chassis (CH4) only
- Increases the full-duplex bandwidth available to each line card bay from 4Gbps to 8Gbps



AT-SB4451A

Gigabit Ethernet Line Card

- 8 x 1000SX ports
- SC connectors with LEDs
- Optional CAM memory AT-SB4262



AT-SB4461A

Gigabit Ethernet Line Card

- 8 x 1000LX ports
- SC connectors with LEDs
- Optional CAM memory AT-SB4262



AT-SB4352

Fast Ethernet Line Card

- 32 x 100FX ports
- MT-RJ fibre connectors with LEDs



AT-SB4452A

Gigabit Ethernet Line Card

- 8 x 1000SX ports
- MT-RJ connectors with LEDs
- Optional CAM memory AT-SB4262



AT-SB4462A

Gigabit Ethernet Line Card

- 8 x 1000LX ports
- MT-RJ connectors
- Optional CAM memory AT-SB4262



AT-SB4261

Switch CAM Memory (AT-SB4211A only)



AT-SB4262

Line CAM Memory (AT-SB424xx only)



2 Switches

The Allied Telesyn family of Switches delivers versatile, highly resilient Gigabit to Fast Ethernet switching with advanced multi-layer capabilities for demanding network core configurations and aggregation of edge switches. Our current switches address today's heterogeneous networks - from the smallest small business network to large enterprise LANS - and facilitate their growth by offering numerous options.

Layer 2 Ethernet

Allied Telesyn's full range of standalone and stackable Layer 2 hubs and switches go from 10Mbps to 1Gbps, offering scalable network bandwidth to manage data, voice, and video traffic across the network. Copper and fibre models in unmanaged or intelligent versions can be used to build dependable networks.

Layer 3-7 Networking Technology

Allied Telesyn's standalone and chassis-based Layer 3 switch/router solutions are designed to provide high performance, multi-layer switching platforms for desktop, workgroup and core connectivity at speeds up to 1Gbps. The Rapier 24i switch is the only Layer 3 switch on the market that can aggregate E1 and E3 circuits into Ethernet with rate limiting capability.

Gigabit Ethernet

As high-speed Gigabit Ethernet continues to spread from the LAN into the data centre and out to the network service provider, Ethernet will become even more pervasive, with accelerated adoption expected in almost every market. Allied Telesyn's Gigabit Ethernet capabilities are considerable and fast growing, offering exceptionally high performance, reliability and price/performance.

Stackability

Allied Telesyn's stacking implementation gives customers a high performing, easy to manage, low cost of ownership solution that is easily integrated into an installed base of networking solutions.

Allied Telesyn's stacking implementation enables network managers to manage up to nine geographically dispersed switches with the same effort as the management of one. Our stacking implementation provides Web and CLI-based management of the switches through a single IP address. Using open standards Ethernet interfaces as stacking links, the Allied Telesyn stacking implementation avoids the use of expensive specialised hardware with limited topologies. This stacking functionality is available on the Rapier™, 8600, 8700 and 8800 series switches.

Switch Selector

Multi-layer switches			
10/100Mbps copper >>>	AT-8948A	10/100TX x 48 ports, 1000X SFP uplink bays x 4	8
	AT-8948P	10/100TX x 48 ports, IPv6 acc card +256M, 1000X SFP uplink bays x 4	8
10/100/1000Mbps & 1000Mbps copper >>>	AT-9924T	10/100/1000T x 24 ports, 1000X SFP combo ports x 4	9
	AT-9924SP	1000X x 24 SFP ports	9
1000Mbps & 1000Mbps copper >>>	AT-9924T/4SP	10/100/1000T x 24 ports, 1000X SFP combo ports x 4	9
1000Mbps >>>	AT-9812T	10/100/1000T x 12 ports, GBIC bays x 4	10
	AT-9816GB	GBIC bays x 16	10
Layer 3 switches			
1000Mbps fibre >>>	Rapier G6f	1000SX or 1000LX x 6 ports (SC), Expansion bays x 2	12
1000Mbps copper >>>	Rapier G6	10/100/1000T x 6 ports, Expansion bays x 2	12
100Mbps fibre >>>	Rapier I6fi >>>	100FX x 16 ports (SC or MT-RJ), Expansion bays x 2	13
10/100Mbps copper >>>	Rapier 24i >>>	Supports Network Service Module (NSM)	13
		10/100TX x 24 ports, Expansion bays x 2	13
		Supports Network Service Module (NSM)	13
10/100/1000Mbps copper >>>	Rapier 48i	10/100TX x 48 ports, Expansion bays x 2	13
	AT-9724TS	10/100/1000T x 24 ports, SFP combo x 4	14
	AT-8624T/2M	10/100TX x 24 ports, Uplink module bays x 2	16
	AT-8648T/2SP	10/100TX x 48 ports, SFP x 2 ports	16

Layer 3-7 switches			
10/100Mbps copper >>>	AT-8824 AT-8848	10/100TX x 24 ports Fast Ethernet, GBIC bays x 2 10/100TX x 48 ports Fast Ethernet, GBIC bays x 2	15 15
Layer 2-4 switches			
10/100Mbps copper >>>	AT-8724XL AT-8748XL	10/100TX x 24 ports, Expansion bays x 2 10/100TX x 48 ports, Expansion bays x 2	17 17
Layer 2 managed stackable switches			
1000Mbps & 10/100Mbps copper & 10/100Mbps fibre >>>	AT-8400 >>>	10/100TX up to 96 ports 100FX up to 48 ports 10FL up to 48 ports 1000T up to 12 ports 1000FX up to 12 ports 100FX (MT-RJ) x 16 ports, Expansion bays x 2 100FX (SC) x 16 ports, Expansion bays x 2	18 19 19 19 19 19 19
100Mbps fibre >>>	AT-8016F/MT AT-8016F/SC	10/100TX x 12 ports, Expansion bay x 1 10/100TX x 12 ports, Expansion bay x 1	19 19
10/100Mbps copper >>>	AT-8012M AT-8012M-QS AT-8024GB AT-8024M AT-8024 AT-8026FC AT-8026T	10/100TX x 24 ports, GBIC bays x 2 10/100TX x 24 ports, Expansion bays x 2 10/100TX x 24 ports 10/100TX x 24 ports, 100FX (SC) x 2 ports 10/100TX x 24 ports, 10/100/1000T x 2 ports	19 19 19 19 19 19 19
10/100Mbps copper & 100Mbps fibre >>>	AT-8088/SC AT-8088/MT	10/100TX x 8 ports, Expansion bays x 2 10/100TX x 8 ports, 100FX (MT-RJ) x 8 ports, Expansion bays x 2	19 19
1000Mbps & 10/100Mbps copper >>>	AT-8326GB AT-8350GB >>>	10/100TX x 24 ports, 10/100/1000T x 2 ports, GBIC bays x 2 10/100TX x 48 ports, 10/100/1000T x 2 ports GBIC bays x 2, Expansion bay x 1	20 20
Layer 2 managed switches			
10/100/1000Mbps, 10/100Mbps & 100Mbps copper >>>	AT-8516F/SC AT-8516F/MT AT-8524M AT-8550/GB AT-8550/SP AT-9424T/GB AT-9424T/SP AT-9410GB	100FX (SC) x 16 ports, Expansion bays x 2 100FX (MT-RJ) x 16 ports, Expansion bays x 2 10/100TX x 24 ports, Expansion bays x 2 10/100TX x 48 ports, GBIC bays x 2 (unpopulated), 10/100/1000T x 2 ports 10/100TX x 48 ports, SFP bays x 2 (unpopulated), 10/100/1000T x 2 ports 10/100/1000T x 22 ports, GBIC bays x 2, 10/100/1000T x 2 ports (standby) 10/100/1000T x 22 ports, SFP bays x 2, 10/100/1000T x 2 ports (standby) 10/100/1000T x 10 ports, GBIC bays x 2	21 21 21 21 21 22 22 23
Layer 2 unmanaged switches			
10/100Mbps copper with external power supply >>>	AT-FS705L AT-FS705LE AT-FS708LE AT-FS716E AT-FS716LE	10/100TX x 5 ports 10/100TX x 5 ports, external power supply 10/100TX x 8 ports, external power supply 10/100TX x 16 ports, external power supply 10/100TX x 16 ports, external power supply	24 24 24 24 24
10/100Mbps copper with fibre uplink & external power supply >>>	AT-FS705EFC AT-FS709EFC	10/100TX x 4 ports, 100FX (SC) x 1 port, external power supply 10/100TX x 8 ports, 100FX (SC) x 1 port, external power supply	24 24
10/100Mbps copper with fibre uplink >>>	AT-FS709FC AT-FS713FC AT-FS717FC	10/100TX x 8 ports, 100FX (SC) x 1 port 10/100TX x 12 ports, 100FX (SC) x 1 port 10/100TX x 16 ports, 100FX (SC) x 1 port	24 24 24
10/100Mbps copper >>>	AT-FS708 AT-FS708L AT-FS716 AT-FS716L AT-FS724L AT-FS7016 AT-FS7024 AT-FS7009E AT-FS7109 AT-FS7109GB	10/100TX x 8 ports, rack-mountable 10/100TX x 8 ports, Desktop only 10/100TX x 16 ports 10/100TX x 16 ports 10/100TX x 24 ports 10/100TX x 16 ports 10/100TX x 24 ports 10/100TX x 8 ports + 1 Gigabit port, external power supply 10/100TX x 8 ports + 1 Gigabit port 10/100TX x 8 ports + 1 Gigabit port + 1 GBIC	24 24 24 24 24 24 24 24 24 24
Layer 2 unmanaged Gigabit switches			
10/100/1000Mbps copper >>>	AT-GS905 AT-GS908 AT-GS908GB AT-GS916 AT-GS916GB AT-GS924 AT-GS924GB AT-GS924i	10/100/1000TX x 5 ports 10/100/1000TX x 8 ports 10/100/1000TX x 8 ports, GBIC bays x 2 10/100/1000TX x 16 ports 10/100/1000T x 16 ports, GBIC bays x 2 10/100/1000TX x 24 ports 10/100/1000T x 24 ports, GBIC bays x 2 10/100/1000TX x 24 ports	23 23 23 23 23 23 23 23

Switches

10/100Mbps • Multi-layer

AT-8948

Multi-layer IPv4 & IPv6 Switches



AT-8948A

10/100TX x 48 ports
1000X SFP uplink bays x 4

AT-8948P

10/100TX x 48 ports
IPv6 accelerator card installed +256M
1000X SFP uplink bays x 4

Lifetime Warranty + 1 Year Net.Cover®
Basic Plus Support Program

Features

- Huge capabilities and flexibility compressed into 1RU form factor
- Front to back cooling for optimum rack/cabinet airflow
- Operating temperature extends to 50°C (122°F)
- Internal dual hot-swappable AC or DC load-sharing power supplies remove the need for an expensive and rack space wasting RPS
- Layer 2 and 3 IPv4 and IPv6 routing all at wirespeed (optional accelerator card required for IPv6 capacity)
- Built from a 37.6Gbps switch fabric yielding 13.1Mpps performance
- Provides 256K layer 3 IPv4 address table entries (256MB SDRAM or 512MB SDRAM must be fitted)
- Supports full 4096 VLANs with VLAN double tagging
- Private VLANs
- Supports 4096 Layer 3 interfaces
- A Compact Flash port, accessible via the front panel, which enables configurations and other files to be saved or transferred between switches
- Asynchronous management port available via the front panel for ease of access
- SFP uplink ports will support any combination of 1000T, 1000SX, 1000LX or 1000ZX
- Full environmental monitoring, with alerts to network manager in case of failure of any PSU or FAN

- Extensive wirespeed traffic classification
- Policy-based QoS features
- Min / max bandwidth control with bandwidth slice resolution down to 1kbps
- Buffered max bandwidth control at egress on all ports, and on each of 8 egress queues per port
- Three drop precedence (green, yellow and red) per priority queue on egress for improved TCP-IP bandwidth limiting performance
- SNMP MIBs for QoS counters on all ports
- Low latency for voice and multi-media support
- Advanced routing protocols OSPF, BGP4, IS-IS, RIP and RIPV2, DVMRP, PIM-SM, PIM-DM
- Support for Equal Cost Multi Path (ECMP) routing in hardware
- Port trunking
- Port mirroring
- Wirespeed multicasting
- Secure SSH capability on management and access
- Firewall
- IEEE 802.1x support
- Hardware based-encryption/compression card (PAC) option for IPSec support and to accelerate 3DES



Policy-based Quality of Service

Comprehensive, low latency QoS features operating at wirespeed provide flow based traffic management with full classification, prioritisation, traffic shaping and min/max bandwidth profiles. The AT-8948 QoS features are ideal for service providers wanting to ensure maximum availability of premium voice, video and data services, and at the same time manage customer Service Level Agreements (SLAs). For enterprise customers, the AT-8948 QoS features protect productivity by guaranteeing performance of business-critical applications including VoIP services, and help restore and maintain responsiveness of enterprise applications in the networked workplace.

Industry-leading features

The AT-8948 reaches new and unmatched heights in performance, flexibility, and reliability. Packaged in a compact 1RU standard rackmount chassis, the AT-8948 is a highly featured access solution incorporating a new generation switching core for wirespeed Layer 3 IPv4 and IPv6 routing, exceptional Quality of Service (QoS) features, and a robust hardware design with hot-swappable dual power supplies.

SFP (Small Form Pluggable) modules

AT-MG8T	1000T SFP port	100m
AT-MG8SX	1000SX SFP port	300m
AT-MG8LX10	1000LX SFP port	10km
AT-MGZX	1000ZX SFP port	70km
AT-MG8ZX	1000ZX SFP port	80km

AT-8948 IPv6 Accelerator card

AT-ACC01	HW IPv6 high-speed
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Model	Dimensions	Weight
AT-8948	44cm x 44cm x 4.4cm	6.5kg

9924 Series

Multi-layer Gigabit Switches



AT-9924T *

10/100/1000T × 24 copper ports
1000X × 4 SFP combo ports

AT-9924SP *

1000X × 24 SFP ports

AT-9924T/4SP *

10/100/1000T × 24 copper ports
1000X × 4 SFP combo ports

Features

- Supports IPv6 Accelerator card

Lifetime Warranty + 1 Year Net.Cover®
Basic Plus Support Program

Common features of the 9924 series

- Huge capabilities and flexibility compressed into 1RU form factor
- Internal dual hot-swappable AC or DC load-sharing power supplies remove the need for an expensive and rack space wasting RPS
- Built from a 48Gbps switch fabric yielding 35.7Mpps performance
- Provides up to 256K Layer 3 IPv4 address table entries (256MB SDRAM or 512MB SDRAM must be fitted)
- Supports full 4096 VLANs with VLAN double tagging
- Gigabit SFP ports will support any combination of 1000T, 1000SX, 1000LX SFP or 1000ZX SFP
- Advanced routing protocols OSPF, BGP4, IS-IS, RIP and RIPv2, advanced multicasting protocols, DVMRP, PIM-SM, PIM-DM, MLD and IGMP
- Port trunking
- Advanced wirespeed traffic classification and QoS capabilities
- SNMPv3*

* Check with your sales representative for availability



SFP (Small Form Pluggable) modules

AT-MG8T	1000T SFP port	100m
AT-MG8SX	1000SX SFP port	300m
AT-MG8LX10	1000LX SFP port	10km
AT-MGZX	1000ZX SFP port	70km
AT-MG8ZX	1000ZX SFP port	80km

AT-9924T IPv6 Accelerator card

AT-ACC01 HW IPv6 high-speed

Model	Dimensions	Weight
9924 series	N/A	N/A

Switches

10/100Mbps & 10/100/1000Mbps • Multi-layer

9800 Series Multi-layer Switches



AT-9812T

10/100/1000T x 12 ports
GBIC bays x 4



AT-9816GB

GBIC bays x 16

Lifetime Warranty + 1 Year Net.Cover®
Basic Plus Support Program

* Check with your sales representative
for availability

Common features of the 9800 series

- 32Gbps non-blocking switch fabric
- Wirespeed IP and IPX routing (Layer 3 & 4)
- Wirespeed forwarding at Layer 2
- IPv6 support
- AppleTalk routing
- CoS (Class of Service)
- Wirespeed multicasting services
- Up to 232,000 Layer 2 or Layer 3 address entries
- Bandwidth limiting (64KB increments)
- DiffServ
- IEEE 802.1p prioritisation
- Port trunking
- IEEE 802.1x
- 4096 VLANs
- Wirespeed QoS
- Loadbalancing (optional)
- 350MHz CPU
- 128/256 SDRAM
- 32/128 Flash
- Compact Flash Socket for operational cost reduction
- 1.5 U chassis height
- Stateful Inspection Firewall
- Auto-ranging 100-240V AC
- -48VDC power supply option * (factory installed)
- Graphical User Interface
- Redundant power supply option



9800 Series Expansion Modules

- AT-RPS9000** Chassis for up to four redundant power supplies, including one power supply
- AT-PWR9000** Additional redundant power supply with cable

Allied Telesyn standards-based

Gigabit Interface Converter (GBIC) modules

AT-G8T	1000T x 1 port	100m
AT-G8SX	1000SX x 1 port	550m
AT-G8LX10	1000LX x 1 port	10km
AT-G8LX25	1000LX x 1 port	25km
AT-G8LX40	1000LX x 1 port	40km
AT-G8LX70	1000LX x 1 port	70km

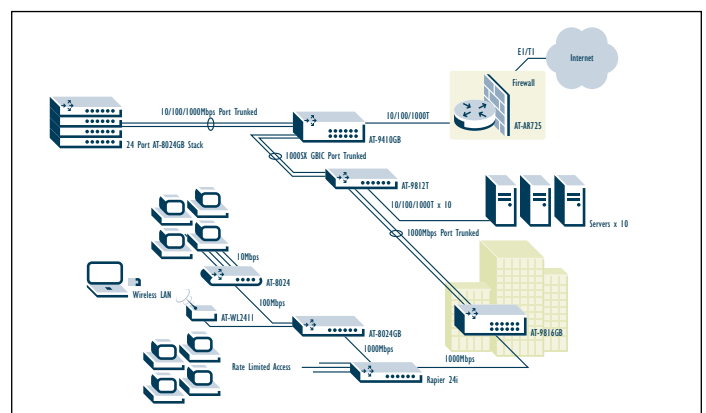
Model	Dimensions	Weight
AT-9812T	44cm x 36cm x 6.6cm	6.6kg
AT-9816GB	44cm x 36cm x 6.6cm	6.6kg

Example:

9800 Series Core Application

The network core of a medium-sized company is built around the 9800 series of Layer 3+ Gigabit Ethernet standalone switches. As well as acting as the primary aggregator for a stack of high-density Fast Ethernet Layer 2 switches and other Layer 2 and Layer 3 workgroup devices, a second 9800 series switch also aggregates the business's considerable server farm capacity.

With a 32Gbps switching fabric and throughput capacity able to handle the most demanding applications, a 9800 series multi-layer Gigabit switch delivers exceptional forwarding performance at both Layer 2 and Layer 3. VLANs can be created from any port using standards-based IEEE 802.1Q tagging or Allied Telesyn's highly programmable flow based classifier, enabling policy based service level agreements (SLA) to limit maximum bandwidth or guarantee minimum throughput in 64kbps increments. Port aggregation allows the creation of Gigabit trunk groups, resulting in greater fault tolerance and significantly increased bandwidth among switches, routers and individual servers.



Uncompromised performance

32Gbps of Layer 2 and Layer 3 throughput delivers the power to run at full wirespeed non-blocking without compromise (all packet sizes).

Traffic management

Industry leading QoS features with independent bandwidth and latency control allow multi-faceted tuning of network traffic. Minimum and maximum bandwidth limiting in 64kbps increments and low latency for voice applications operating at wirespeed.

Multi-protocol service

Wirespeed IPv4 and IPX are complimented with advanced IPv6 and AppleTalk for full multi-protocol capability. Many routing protocols RIPv1/v2, OSPFv2, BGP4, IS-IS, VRRP, IGMP, DVMRP, PIM-DM/SM ensuring operation within almost any architecture.

Exceptional flexibility

Port flexibility through GBIC modules, Standard Spanning Tree Protocol or Rapid STP (IEEE 802.1w), large combinations of port trunking options, 4096 VLANs which can be explicitly tagged or internally defined based on a wide variety of packet classifications.

Ease of operations

Unmatched set of tools to assist in management including DHCP client or server; built-in e-mail client, and an advanced set of triggers all accessed through a secure, intuitive, customer friendly GUI interface with SNMP and extensive MIB support.

Features

Standard features include all the features typically required by Enterprise, Education, Government or Service Provider environments

Layer 2

- IEEE 802.1Q, 802.1p, 4096 VLANs
- Port security (MAC inspection)
- Link Aggregation
- GVRP
- IEEE 802.1d and 802.1w (Rapid Spanning Tree)
- IGMP snooping
- Protocol-based VLAN
- MAC address VLAN
- SubNet-based VLAN

Layer 3

- Generic Attribute Registration Protocol (GARP)
- General packet classifier
- Quality of Service
- Point-to-Point Protocol (PPP)
- Internet Protocol (IP)
- IP multicasting
- Open Shortest Path First (OSPF)
- Compression services
- Test facility
- Network Time Protocol (NTP)
- Generic Routing Encapsulation (GRE)
- Trigger facility
- IGMP processing
- ISAKMP
- Logging facility
- Scripting
- Dynamic Host Configuration Protocol (DHCP)
- Layer 2 Tunnelling Protocol (L2TP)
- Simple Network Management Protocol (SNMP)
- Link compression
- IP Security (IPSec) - (future)
- Secure sockets layer
- SSH
- HTTP server
- HTTP client
- TFTP client

Advanced Software Bundle

The advanced software bundle offers the following features

Full Layer 3 option

- AppleTalk
- RSVP
- DVMRP
- PIM-DM
- PIM-SM
- VRRP

Advanced Layer 3

- IPv6
- BGP4
- OSI (IS-IS)
- Loadbalancing

Security pack

- Stateful Inspection Firewall
- SMTP proxy
- HTTP proxy

Switches

10/100/1000Mbps • Layer 3

RAPIER 'G' Series Layer 3 Gigabit Ethernet Switches



Rapiere G6

10/100/1000T x 6 ports
Expansion bays x 2
(Part # AT-RPG6)

Rapiere G6f

1000SX or 1000LX x 6 ports (SC)
Expansion bays x 2
(SX Part # AT-RPG6FSX)
(LX Part # AT-RPG6FLX)

Lifetime Warranty + 1 Year Net.Cover®
Basic Plus Support Program

Model	Dimensions	Weight
Rapiere 'G' series	44cm x 36cm x 6.6cm	5.5kg

Common features of the Rapiere 'G' series

- Wirespeed IP Layer 3 routing performance
- 35Gbps non-blocking switch fabric for low latency

Common features of the entire Rapiere™ series

- Expansion bays x 2
- High-performance 200MHz RISC-based processor
- Non-blocking Layer 2 switching performance
- 8,000 Layer 2 addresses
- 2,000 Layer 3 addresses
- IEEE 802.1Q VLAN tagging
- IEEE 802.1p QoS (4 priority queues)
- IEEE 802.1x
- IP RIPv1/v2, OSPFv2
- Real-time application
- VRRP (Virtual Router Redundancy Protocol)
- Console, Telnet, Web-browser, SSH, SNMP and RMON
- Universal 100-240V AC, 50/60Hz power supply
- Stateful Inspection Firewall option
- -48VDC power supply option (factory installed)
- Redundant power supply option
- 1.5 U, 19" rackmount chassis

AlliedWare™

The Rapiere 'G' series ship with Basic Layer 3 software. Full Layer 3, Advanced Layer 3 and Security pack option available. Please see technical specification details and ordering p/n on page 46.

Lifetime Warranty + 1 Year Net.Cover®
Basic Plus Support Program



Allied Telesyn standards-based Gigabit Interface Converter (GBIC) modules **

AT-G8T	1000T x 1 port	100m
AT-G8SX	1000SX x 1 port	550m
AT-G8LX10	1000LX x 1 port	10km
AT-G8LX25	1000LX x 1 port	25km
AT-G8LX40	1000LX x 1 port	40km
AT-G8LX70	1000LX x 1 port	70km

** AT-A42 required



Rapiere 'G' & 'i' series expansion modules

AT-A35SX	1000SX x 1 port (SC)
AT-A35LX	1000LX x 1 port (SC)
AT-A39T	10/100/1000T x 1 port
AT-A40	100FX multi-mode x 1 port (SC or MT-RJ)
AT-A41	100FX single-mode x 1 port (SC or MT-RJ)
AT-A42	GBIC bay x 1 port *

Rapiere 'G' & 'i' series redundant power modules

AT-RPS8000	4 slot redundant power supply chassis including one power supply
AT-PWR8000	Additional redundant power supply with cable

* Uses Allied Telesyn standards-based GBIC modules

RAPIER 'i' Series Layer 3 Fast Ethernet Switches



Rapier 16fi *

100FX x 16 ports (SC or MT-RJ)

Expansion bays x 2

Supports Network Service Module (NSM)

(SC Part # AT-RP16FISC)

(MT-RJ Part # AT-RP16FiMT)



Rapier 24i

10/100TX x 24 ports

Expansion bays x 2

Supports Network Service Module (NSM)

(Part # AT-RP24i)



Rapier 48i

10/100TX x 48 ports

Expansion bays x 2

(Part # AT-RP48i)

Features

- Wirespeed IP Layer 3 routing performance
- 9.6Gbps or 19.2Gbps switch fabric
- Slide-in Network Service Module (NSM) - (Excludes AT-RP48i)
- E1, T1, BRI, Sync, Async and WAN media options
- L2TP, IPSEC VPNs
- Bandwidth limiting
- 255 VLANs
- VoIP access (Rapier 24i)

Common features of the entire Rapier™ series

- Expansion bays x 2
- High-performance 200MHz RISC-based processor
- Non-blocking Layer 2 switching performance
- 8,000 Layer 2 addresses
- 2,000 Layer 3 addresses
- IEEE 802.1Q VLAN tagging
- IEEE 802.1p QoS (4 priority queues)
- IP RIPv1/v2, OSPFv2
- IEEE 802.1x
- VRRP (Virtual Router Redundancy Protocol)
- Console, Telnet, Web-browser, SSH, SNMP and RMON
- Universal 100-240V AC, 50/60Hz power supply
- Stateful Inspection Firewall option
- -48vDC power supply option (factory installed)
- Redundant power supply option
- 1.5 U, 19" rackmount chassis
- VPN IPSEC/ISAKMP option (Rapier 24i)

Model	Dimensions	Weight
Rapier 'i' series	44cm x 36cm x 6.6cm	5.5kg

AlliedWare™

The Rapier 'i' series ship with Basic Layer 3 software. Full Layer 3, Advanced Layer 3 and Security pack option available. Please see technical specification details and ordering p/n on page 46.

Rapier 'i' series Port Interface Cards (PICs)

- AT-AR020** E1/T1 PRI with integral CSU/DSU x 1 port
- AT-AR021** BRI x 1 port (U & S/T)
- AT-AR023** Sync x 1 port (E1, T1)
- AT-AR024** Async (RS232) x 4 ports (4 x 115kbps)
- AT-AR027** VoIP (FXS)

Rapier 'i' series license options

- AT-3DES** Triple DES/SW - requires encryption card

Rapier 'i' series Port Accelerator Card (PAC)

- AT-AR061** Encryption DES, 3DES & HMAC + Compression high performance card

Rapier 24i and Rapier 16fi

Network Service Module (NSM)

- AT-AR040** NSM for 4 PICs (only 2 x E1/T1 supported)

Lifetime Warranty + 1 Year Net.Cover® Basic Plus Support Program

Rapier™

NSM AT-AR040

AT-AR020
1 x PRI port

AT-AR021
1 x BRI port

AT-AR023
1 x Sync port

AT-AR024
4 x Async ports

Switches

10/100/1000Mbps • Layer 3

The AT-9724TS is an advanced Layer 3 functionality switch designed to meet the requirements of multimedia switches and bring traffic control and high-performance to the edge of the network. With IP routing capabilities for investment protection and flexible management tools, the AT-9724TS is designed to be a cost effective solution for today's market with the ability to expand as network demands grow - at no extra cost. Specially designed for

high-performance desktop edge connectivity, workgroup, midsize networks, campus and metro access edge, the AT-9724TS provides Layer 3 functionality to support multimedia services like voice and video applications which are becoming more and more integrated into data networks. When stacked, up to 288 ports of Gigabit Ethernet can be achieved, providing enough performance for medium enterprises, multi-unit

buildings, hospitality, schools, and universities. Utilising a powerful switch fabric, the AT-9724TS pass traffic reliably and efficiently with wire-speed performance and non-blocking architecture. When stacked up to 288 ports with the integrated stacking modules, the switches pass data packets at an impressive stacked backplane speed of 40Gbps.

AT-9724TS

Layer 3 Stackable Gigabit Ethernet Switch



AT-9724TS

10/100/1000T x 24 ports
SPF combo x 4

Two Year Warranty + 1 Year Net.Cover®
Basic Plus Support Program

Features

Stack up to 288 ports

- 40Gbps dedicated stack ports (2 x 10Gbps ports)

88Gbps switching fabric, 65.5Mpps

- Wire-speed
- 4 SFP bays for fibre media
- Supports up to 4096 VLANs

Eight Priority queues per port

- GVRP support
- Full QoS for multimedia applications
- Wire-speed Layer 2 to 3 filtering
- Wire-speed Layer 2 switching
- Wire-speed Layer 3 IP routing

Jumbo Frame up to 9000bytes

- IP RIPV1/V2
- VRRP support
- Rapid Spanning Tree protocol

IEEE 802.1s Multiple Spanning Tree support

- SSH for management
- SSL
- IGMPv1 and IGMPv2
- Web-based management
- SNMP support
- RMON support

IEEE 802.1x authentication

- Port security
- Port mirroring
- 1 RU form factor

Redundant power supply option

Model	Dimensions	Weight
AT-9724TS	44cm x 21cm x 4.4cm	3.2kg

Intelligent Workgroup Switches

The 8800 series Intelligent Workgroup Switches deliver high performance switching in a compact 1RU form factor. Available with either 24 or 48 10/100TX Fast Ethernet ports, both models offer full wirespeed switching and IP routing, with two optional Gigabit Ethernet uplink ports and

redundant power supply. The features of the 8800 series Intelligent Workgroup Switches make it the perfect choice for your workgroup applications, incorporating ease of management, high bandwidth, proven security and traffic prioritisation in a slimline 1RU chassis. Ideal for

environments like enterprise and educational institutions demanding reliable, high bandwidth Ethernet for services such as web conferencing and live video streaming. Prioritisation of data streams with QoS ensures that mission critical traffic will enter the fastest queue.

8800 Series Layer 3 - 7 Intelligent Workgroup Switches



AT-8824

10/100TX x 24 ports Fast Ethernet
GBIC bays x 2

AT-8848

10/100TX x 48 ports Fast Ethernet
GBIC bays x 2

**Lifetime Warranty + 1 Year Net.Cover®
Basic Plus Support Program**

* Check with your sales representative
for availability

Model	Dimensions	Weight
8800 series	44cm x 33cm x 4.5cm	5kg

Common features of the 8800 series

- Half/full-duplex
- Auto-negotiation
- Auto MDI/MDI-X
- Wirespeed IP (Layer 3)
- Wirespeed forwarding at Layer 2
- 1RU
- Bandwidth limiting
- Broadcast and multicast traffic control
- 2,000 Layer 3 addresses
- 8,000 Layer 2 MAC
- 255 VLANs
- IEEE 802.1Q VLAN tagging
- IEEE 802.1p QoS (4 priority queues)
- IEEE 802.1x
- TACACS+
- L2TP
- IP RIPv1/v2 and RIPv2
- OSPFv2
- VRRP
- IEEE 802.1s
- Private VLAN
- VLAN relay
- Stateful Inspection Firewall option
- IPSec VPN Optional
- BGP4 option
- IPv6 option
- Loadbalancing option
- Redundant power supply option
- 400MHz Processor
- 128KB Non-volatile Storage (battery backed SRAM)
- Up to 256MB of SDRAM memory on DIMM
- 32MB of FLASH memory (expandable to 32MB for future upgrades)
- Console Port



Allied Telesyn standards-based Gigabit Interface Converter (GBIC) modules

AT-G8T	1000T x 1 port	100m
AT-G8SX	1000SX x 1 port	550m
AT-G8LX10	1000LX x 1 port	10km
AT-G8LX25	1000LX x 1 port	25km
AT-G8LX40	1000LX x 1 port	40km
AT-G8LX70	1000LX x 1 port	70km



8800 series redundant power modules

AT-RPS8000	4 slot redundant power supply chassis including one power supply
AT-PWR8000	Additional redundant power supply with cable

AlliedWare™

The 8800 series ship with Basic Layer 3 software. Full Layer 3, Advanced Layer 3 and Security pack option available. Please see technical specification details and ordering p/n on page 46.

Switches

10/100Mbps • Layer 3



Our comprehensive service and support plans designed to protect your network investments well into the future.

See pgs 62-66 for details

8600 Series Affordable Layer 3 Fast Ethernet Switches



AT-8624T/2M

10/100TX x 24 ports
Uplink module bays x 2

AT-8648T/2SP

10/100TX x 48 ports
SFP x 2 ports

Lifetime Warranty + 1 Year Net.Cover®
Basic Plus Support Program

Quality of Service features

- IEEE 802.1p
- Support for IEEE 802.1p override at ingress
- Weighted Round Robin queueing algorithm
- 4 priority queues per port
- DiffServ
- IP Type of Service
- Classification, policing/metering, and marking functions on a per-port basis at ingress and queueing/scheduling function at egress
- QoS classification of incoming packets for QoS

Classification

- Source IP address
- Source MAC address
- Destination MAC address
- 16-bit Ethertype classification

Multicast

- IGMP
- IGMP snooping
- IGMP proxy

Bandwidth Limiting

- Down to 64kbps ingress
- Down to 1Mbps egress

LAN Features

- Port-based VLAN
- IEEE 802.1Q tagged VLAN
- VLAN Passthrough support
- Overlapping VLAN
- Private VLAN
- VLAN Relay

Common features of the 8600 series

- Full QoS for multimedia applications
- Wirespeed Layer 2/3/4+ filtering
- Wirespeed Layer 2 switching
- Wirespeed Layer 3 IP routing
- Port trunking with Link aggregation (IEEE 802.3ad static*) (LACP*)
- Stacking with open standards-based interfaces
- Support up to 255 VLANs
- Private VLANs*
- Bandwidth limiting
- IP RIPv1 and v2
- OSPFv2 support
- VRRP support
- Rapid Spanning Tree Protocol
- MSTP (IEEE 802.1s)*
- SSH for management
- SSL
- TACACS+
- IEEE 802.1x
- SNMPv3
- Redundant power supply option
- 2 expansion bays

* Check with your sales representative for availability

Model	Dimensions	Weight
AT-8624T/2M	43.8cm x 18.4cm x 4.4cm	3.3kg
AT-8648T/2SP	43.8cm x 26.1cm x 4.4cm	3.6kg

8600 series expansion modules

AT-A45/SC	100FX x 1 port (SC)
AT-A45/MT	100FX x 1 port (MT-RJ)
AT-A45/SC-SM15	100FX x 1 port (MT-RJ)
AT-A46	10/100/1000T x 1 port
AT-A47	GBIC bay x 1 port



SFP (Small Form Pluggable) modules**

AT-MG8T	1000T SFP port	100m
AT-MG8SX	1000SX SFP port	300m
AT-MG8LX10	1000LX SFP port	10km
AT-MGZX	1000ZX SFP port	70km
AT-MG8ZX	1000ZX SFP port	80km

** for use with the AT-8648T/2SP-xx



Gigabit Interface Converters (GBIC) modules***

AT-G8T	1000T x 1 port	100m
AT-G8SX	1000SX x 1 port	550m
AT-G8LX10	1000LX x 1 port	10km
AT-G8LX25	1000LX x 1 port	25km
AT-G8LX40	1000LX x 1 port	40km
AT-G8LX70	1000LX x 1 port	70km

*** for use with the AT-A47

8600 series redundant power modules

AT-RPS3004	Chassis for up to four redundant power supplies, including one power supply
AT-PWR3004	Additional redundant power supply with cable

8700XL Series Layer 2 - 4 Switches



AT-8724XL

10/100TX x 24 ports
Expansion bays x 2

AT-8748XL

10/100TX x 48 ports
Expansion bays x 2

**Two Year Warranty + 1 Year Net.Cover®
Basic Plus Support Program**

Common features of the 8700XL series

- Full QoS for multi-media and realtime applications
- Wirespeed Layer 4+ filtering
- Wirespeed Layer 2 switching
- Classifiers
- Wirespeed Layer 3 IP routing
- Support up to 255 VLANs
- Broadcast Storm Protection
- 8,000 MAC addresses
- Buffer memory 4MB
- Private VLANs
- Bandwidth limiting
- IP RIPv1/v2, OSPFv2
- Rapid Spanning Tree protocol
- VRRP (Virtual Router Redundancy Protocol)
- GARP
- IEEE 802.1x *
- Triggers
- SSH
- SSL
- GUI Web interface
- Auto-negotiation speed and duplex ports
- Auto MDI/MDI-X
- Redundant power supply option
- 1.5 U, 19" rackmount chassis
- Expansion bays x 2
- Port security

Model	Dimensions	Weight
8700XL series	44cm x 36cm x 6.6cm	5.5kg

* Check with your sales representative for availability



Allied Telesyn standards-based Gigabit Interface Converter (GBIC) modules ***

AT-G8T	1000T x 1 port	100m
AT-G8SX	1000SX x 1 port	550m
AT-G8LX10	1000LX x 1 port	10km
AT-G8LX25	1000LX x 1 port	25km
AT-G8LX40	1000LX x 1 port	40km
AT-G8LX70	1000LX x 1 port	70km

*** AT-A42 required

8700XL series expansion modules

AT-A35SX	1000SX x 1 port (SC)
AT-A35LX	1000LX x 1 port (SC)
AT-A39T	10/100/1000T x 1 port
AT-A40	100FX multi-mode x 1 port (SC or MT-RJ)
AT-A41	100FX single-mode x 1 port (SC or MT-RJ)
AT-A42	GBIC bay x 1 port **



8700XL series redundant power modules

AT-RPS8000	4 slot redundant power supply chassis including one power supply
AT-PWR8000	Additional redundant power supply with cable

** Uses Allied Telesyn standards-based GBIC modules

Switches - Enhanced Stacking

10/100/1000Mbps • Layer 2



Our comprehensive service and support plans designed to protect your network investments well into the future.

See pgs 62-66 for details

Enhance your network ENHANCED STACKING™

This new technology gives network managers a flexible tool that enables them to manage multiple switches (24), placed in multiple locations, with a single IP address.

In traditional stacking technology each switch in a stack requires to be located close to each other. These stacks are

generally limited to four or six switches and stacking modules are often needed. When reconfiguring is required, traditional stacking often requires a time-consuming effort.

ENHANCED STACKING™ technology has no requirement for the switches to be located near to each other and it

can support up to 24 switches within a single broadcast domain. The stacking functionality is housed in the software and it makes reconfigurations fast and simple. Using the familiar Telnet interface, network managers can quickly designate virtual stacks of switches with redundant master switches.

AT-8400

Layer 2 Managed Stackable Fast Ethernet Switch



AT-8400

13 slot mini chassis
10/100TX up to 96 ports
100FX up to 48 ports
10FL up to 48 ports
1000T up to 12 ports
1000FX up to 12 ports

Lifetime Warranty + 1 Year Net.Cover®
Basic Plus Support Program

* Check with your sales representative
for availability

System Configuration

- 13 slot modular chassis
- 12 line blade slots
- 1 Switch Fabric/Management slot
- 2 redundant power supply slots (AC)
- 2 Replaceable Fan Trays
- Fully Hot-swappable
- 2 Redundant DC power supply (requires 8400 - DC chassis)

Features

- Wirespeed Switching on all Ethernet ports
- 24Gbps non-blocking Crossbar switch fabric
- 17.8Mpps total Throughput
- Wirespeed Local Switching
- Head-of-Line blocking prevention
- Low latency
 - <40 microsec at 10Mbps
 - <20 microsec at 100Mbps
 - <10 microsec at 1000Mbps
- 255 VLANs
- 8,000 MAC addresses
- Enhanced Stacking™
- Web, CLI, Telnet, Serial
- SNMP v1 & v2
- IEEE 802.1p Class of Service
- IEEE 802.1x port-based Network Access Control
- TACACS+
- RADIUS

Line Card options

- AT-8401 Switch fabric/Management card
- AT-8411 10/100TX x 8 ports
- AT-8413 10/100/1000T or 1000X x 1 port
- AT-8412/SC 100FX x 4 ports (SC)
- AT-8412/MT 100FX x 4 ports (MT-RJ)
- AT-8414 10FL x 4 ports (SC) *

Model	Dimensions	Weight
AT-8400	30.5cm x 43.5cm x 15.6cm	13kg

8000 Series

Layer 2 Managed Stackable Fast Ethernet Switches



Lifetime Warranty + 1 Year Net.Cover®
Basic Plus Support Program

AT-8012M

10/100TX x 12 ports
Expansion bays x 1

AT-8012M-QS

10/100TX x 12 ports
Expansion bays x 1
• Silent fan operation

AT-8016F/SC

100FX (SC) x 16 ports
Expansion bays x 2

AT-8016F/MT

100FX (MT-RJ) x 16 ports
Expansion bays x 2

AT-8024GB

10/100TX x 24 ports
GBIC bays x 2

AT-8024M

10/100TX x 24 ports
Expansion bays x 2

AT-8024

10/100TX x 24 ports

AT-8026FC

10/100TX x 24 ports
100FX (SC) x 2 ports

AT-8026T

10/100TX x 24 ports
10/100/1000T x 2 ports

AT-8088/SC

10/100TX x 8 ports
100FX (SC) x 8 ports
Expansion bays x 2

AT-8088/MT

10/100TX x 8 ports
100FX (MT-RJ) x 8 ports
Expansion bays x 2

Common features of the 8000 series

- 9.6Gbps switch fabric
- 32 VLAN support
- Non-blocking
- Wirespeed forwarding
- Enhanced Stacking™ up to 624 ports
- Port security
- IGMP snooping
- Features Web-based management and SNMP
- IEEE 802.1Q VLAN tagging
- IEEE 802.1p Class of Service
- -48VDC power supply option (AT-8024M and AT-8016F)
- Redundant power supply option (AT-8024M and AT-8016F)

AT-8024M and AT-8016F expansion modules

AT-A45/SC	100FX x 1 port (SC)
AT-A45/MT	100FX x 1 port (MT-RJ)
AT-A46	10/100/1000T x 1 port
AT-A47	GBIC bay x 1 port *

* Uses Allied Telesyn standards-based GBIC modules
Use with AT-G8SX

Model	Dimensions	Weight
8000 series	44cm x 19cm x 4.5cm	2.7kg
AT-8012M	44cm x 21cm x 4.4cm	2.2kg
AT-8012M-QS	28cm x 25cm x 4.4cm	2.2kg
AT-8088	44cm x 19cm x 4.4cm	3.5kg

Switches

10/100Mbps & 10/100/1000Mbps • Layer 2+



Our comprehensive service and support plans designed to protect your network investments well into the future.

See pgs 62-66 for details

8300 Series Layer 2 Managed Stackable Fast Ethernet Switches



AT-8326GB

10/100TX x 24 ports
10/100/1000T x 2 ports
GBIC bays x 2



AT-8350GB

10/100TX x 48 ports
10/100/1000T x 2 ports
GBIC bays x 2
Expansion bay x 1

Features

- Stack up to 144 ports
- Up to 256 VLANs

Common features of the 8300 series

- Non-blocking
- Wirespeed forwarding
- IEEE 802.1Q VLAN tagging
- IEEE 802.3ad Link Aggregation
- IEEE 802.1p Prioritisation
- Enhanced Stacking™ not supported
- Redundant power supply option (AT-8350GB only)

Lifetime Warranty + 1 Year Net.Cover®

Basic Plus Support Program

Model	Dimensions	Weight
8300 series	44cm x 36cm x 6.6cm	5.5kg

AT-8350GB expansion modules

AT-A48/SC 100FX x 2 ports (SC)
AT-A48/MT 100FX x 2 ports (MT-RJ)
AT-A49 10/100/1000T x 2 ports

AT-8350GB redundant power modules

AT-RPS2001 Single redundant power supply for AT-8350GB
AT-RPS2004 Redundant power supply for four AT-8350GB



Allied Telesyn standards-based

Gigabit Interface Converters (GBIC) modules

AT-G8T 1000T x 1 port 100m
AT-G8SX 1000SX x 1 port 550m
AT-G8LX10 1000LX x 1 port 10km
AT-G8LX25 1000LX x 1 port 25km
AT-G8LX40 1000LX x 1 port 40km
AT-G8LX70 1000LX x 1 port 70km

8300 series redundant power modules

AT-RPS3004 Chassis for up to four redundant power supplies, including one power supply
AT-PWR3004 Additional redundant power supply with cable

The 8500 series is the latest addition to the comprehensive switching solutions from Allied Telesyn. This family of switches is targeted towards the new growing market segment, namely: the Layer 2+ market. With the LAN

aggregation and core layers' successful migration to Gigabit Ethernet, many network administrators demand at the LAN edge. Layer 2+ switches are purposefully designed to address such requirements. Layer 2+ switches offer

the best compromise between features, performance and value.

This family of switches has more intelligence than the simple Layer 2 switches and yet more cost-effective than the Layer 3 switches.

8500 Series

Layer 2+ Managed Fast Ethernet Switches

AT-8516F/SC

100FX (SC) x 16 ports
Expansion bays x 2

AT-8516F/MT

100FX (MT-RJ) x 16 ports
Expansion bays x 2

AT-8524M

10/100TX x 24 ports
Expansion bays x 2

AT-8550/GB

10/100TX x 48 ports
GBIC bays x 2 (unpopulated)
10/100/1000T x 2 ports

AT-8550/SP

10/100TX x 48 ports
SFP bays x 2 (unpopulated)
10/100/1000T x 2 ports



Common features of the 8500 series

Layer 2 - 4 Intelligence

- Packet look-up at MAC, IP, TCP/UDP layers
- For QoS, ACL, Mirroring, Rate Limiting

Advanced Security

- DoS Attack Protection
- Radius/ TACACS+
- Port security
- Secure Telnet
- IEEE 802.1x
- Layer 2 - 4 ACL

Advanced Services

- Rate Limiting (Ingress and Egress)
- Four levels of services
- IEEE 802.1p for MAC-based QoS
- DiffServ for IP-based QoS

Layer 2 Redundancy

- IEEE 802.1s Multiple STP (compatible with PVST+)
- IEEE 802.3ad Link Aggregation (static)
- IEEE 802.1D Spanning Tree
- IEEE 802.1w Rapid STP

8500 series expansion modules

AT-A45/SC	100FX x 1 port (SC)
AT-A45/MT	100FX x 1 port (MT-RJ)
AT-A45/SC-SM15	100FX x 1 port (MT-RJ)
AT-A46	10/100/1000T x 1 port
AT-A47	GBIC bay x 1 port
AT-STACKM	Two high-speed stacking modules with one 1.5" stacking cable

8500 series redundant power modules

AT-RPS3004	Chassis for up to four redundant power supplies, including one power supply
AT-PVWR3004	Additional redundant power supply with cable

Model	Dimensions	Weight
AT-8516F/SC & MT	43.8cm x 18.4cm x 4.4cm	3.5kg
AT-8524M	43.8cm x 18.4cm x 4.4cm	3.3kg
AT-8550GB & SP	43.8cm x 26.16cm x 4.4cm	3.6kg

Lifetime Warranty + 1 Year Net.Cover®
Basic Plus Support Program

Switches

10/100/1000Mbps • Layer 2



Our comprehensive service and support plans designed to protect your network investments well into the future.

See pgs 62-66 for details

The 9400 series is the latest addition to the comprehensive switching solutions from Allied Telesyn. This family of switches is targeted towards the new growing market segment, namely: the Layer 2+ market. With the LAN aggregation and core layers' successful migration to Gigabit Ethernet, many network administrators demand easy to manage, cost effective and more

intelligent switches at the LAN edge. Layer 2+ switches are purposefully designed to address such requirements. Layer 2+ switches offer the best compromise between features, performance and value. This family of switches has more intelligence than the simple Layer 2 switches and yet more cost-effective than the Layer 3 switches.

The sweet spot applications for such switches are in:

- Traditional Enterprise LAN (Wiring closet)
- Service-provisioned Leased Offices or MTUs
- Security-conscious Government Institutions
- Security-conscious Financial Institutions
- Cost and security-conscious Educational Institutions

AT-9424T

Layer 2+ Managed Gigabit Ethernet Switch

AT-9424T/GB

10/100/1000T x 22 ports
GBIC bays x 2 (active/unpopulated)
10/100/1000T x 2 ports (standby)

AT-9424T/SP

10/100/1000T x 22 ports
GBIC bays x 2 (active/unpopulated)
10/100/1000T x 2 ports (standby)

Lifetime Warranty + 1 Year Net.Cover®
Basic Plus Support Program

Features

Layer 2 - Layer 4 Intelligence

- Packet look-up at MAC, IP, TCP/UDP layers
- For QoS, ACL, Mirroring, Rate Limiting

Advanced Security

- DoS Attack Protection
- Radius/ TACACS+
- Port security
- Secure Telnet
- IEEE 802.1x
- Layer 2 - Layer 4 ACL

Advanced Services

- Rate Limiting (Ingress and Egress)
- Eight levels of Services
- IEEE 802.1p for MAC-based QoS
- DiffServ for IP-based QoS

L2 Redundancy

- IEEE 802.1s Multiple STP (compatible with PVST+)
- IEEE 802.3ad Link Aggregation (static)
- IEEE 802.1D Spanning Tree
- IEEE 802.1w Rapid STP



Allied Telesyn standards-based Gigabit Interface Converter (GBIC) modules

AT-G8T	1000T x 1 port	100m
AT-G8SX	1000SX x 1 port	550m
AT-G8LX10	1000LX x 1 port	10km
AT-G8LX25	1000LX x 1 port	25km
AT-G8LX40	1000LX x 1 port	40km
AT-G8LX70	1000LX x 1 port	70km

AT-9424T redundant power modules

AT-RPS5004	Chassis for up to four redundant power supplies, including one power supply
AT-PWR5004	Additional redundant power supply with cable

Model	Dimensions	Weight
AT-9424T	44cm x 43.8cm x 18.4cm	3.6kg

AT-9410GB

Layer 2 Managed Gigabit Ethernet Switch



AT-9410GB

10/100/1000T × 10 ports

GBIC bays × 2

Features

- 24Gbps switch fabric
- Non-blocking
- Wirespeed forwarding
- Up to 256 VLANs
- IEEE 802.1Q VLAN tagging
- IEEE 802.3ad Link Aggregation
- IEEE 802.1p Prioritisation

Allied Telesyn standards-based

Gigabit Interface Converters (GBIC) modules

AT-G8T	1000T × 1 port	100m
AT-G8SX	1000SX × 1 port	550m
AT-G8LX10	1000LX × 1 port	10km
AT-G8LX25	1000LX × 1 port	25km
AT-G8LX40	1000LX × 1 port	40km
AT-G8LX70	1000LX × 1 port	70km

Lifetime Warranty + 1 Year Net.Cover®

Basic Plus Support Program

GS900 Series

Layer 2 Unmanaged Gigabit Switches



AT-GS905

10/100/1000TX × 5 ports

AT-GS908

10/100/1000TX × 8 ports

AT-GS908GB

10/100/1000TX × 8 ports

GBIC bays × 2 ports

AT-GS916

10/100/1000T × 16 ports

AT-GS916GB

10/100/1000T × 16 ports

2 GBIC bays

AT-GS924

10/100/1000T × 24 ports

AT-GS924GB

10/100/1000T × 24 ports

2 GBIC bays

AT-GS924i

10/100/1000TX × 24 ports

Common features of the GS900 series

- Wirespeed performance
- Non-blocking architecture
- Auto-negotiation Gigabit ports
- Auto MDI/MDI-X on TX ports
- Transparent to VLAN packets
- Full-duplex flow control
- 2 bays for optional GBIC modules (AT-GS908GB, AT-GS916GB and AT-GS924GB models only)

Allied Telesyn standards-based

Gigabit Interface Converters (GBIC) modules

AT-G8T	1000T × 1 port	100m
AT-G8SX	1000SX × 1 port	550m
AT-G8LX10	1000LX × 1 port	10km
AT-G8LX25	1000LX × 1 port	25km
AT-G8LX40	1000LX × 1 port	40km
AT-G8LX70	1000LX × 1 port	70km

Lifetime Warranty + 1 Year Net.Cover®

Basic Plus Support Program

Model	Dimensions	Weight
AT-9410GB	44cm × 36cm × 6.6cm	5.5kg
AT-GS905	15.9cm × 14.3cm × 3.5cm	.97kg
AT-GS908	26.6cm × 16.2cm × 4.4cm	1.4kg
AT-GS908GB	29.4cm × 20.9cm × 4.4cm	2.2kg
AT-GS916	33cm × 23.1cm × 4.4cm	2.38kg
AT-GS916GB	33cm × 20.4cm × 4.4cm	2.2kg
AT-GS924	44cm × 35.6cm × 4.4cm	2.99kg
AT-GS924GB	43.2cm × 25cm × 4.4cm	5.25kg
AT-GS924i	44cm × 33cm × 4.4cm	2.5kg

Switches

10/100/1000Mbps • Layer 2

FS700 Series

Layer 2 Unmanaged Fast Ethernet Switches



AT-FS705L

10/100TX × 5 ports

AT-FS705LE

10/100TX × 5 ports, external power supply

AT-FS708

10/100TX × 8 ports, rackmountable

AT-FS708L

10/100TX × 8 ports, desktop only

AT-FS708LE

10/100TX × 8 ports, external power supply



AT-FS705EFC

10/100TX × 4 ports, 100FX (SC) × 1 port, external power supply

AT-FS709EFC

10/100TX × 8 ports, 100FX (SC) × 1 port, external power supply

AT-FS709FC

10/100TX × 8 ports, 100FX (SC) × 1 port

AT-FS713FC

10/100TX × 12 ports, 100FX (SC) × 1 port

AT-FS717FC

10/100TX × 16 ports, 100FX (SC) × 1 port

MT-RJ, VF-45 and ST connector options are also available as fibre uplink



AT-FS716

10/100TX × 16 ports

AT-FS716L

10/100TX × 16 ports

AT-FS716LE

10/100TX × 16 ports, external power supply

AT-FS724L

10/100TX × 24 ports

Common features of the FS700 series

- Non-blocking
- Wirespeed
- IEEE 802.1x flow control
- Auto MDI/MDI-X
- Classification class B for all (except AT-FS708L, class A only)
- 99.9 - 100% throughput
- Plug & play

Lifetime Warranty

Model	Dimensions	Weight
AT-FS705L	19.6cm × 11.6cm × 3.6cm	.61kg
AT-FS705LE	10cm × 7.9cm × 2.6cm	.3kg
AT-FS708	24.9 × 11.6cm × 3.6cm	.9kg
AT-FS708L	16cm × 10.1cm × 3cm	.55kg
AT-FS708LE	15cm × 7.8cm × 2.6cm	.5kg
AT-FS705EFC	17.9cm × 9.8cm × 1.7cm	.36kg
AT-FS709EFC	25.4cm × 17.8cm × 9.8cm	.45kg
AT-FS709FC	30.4cm × 18.2cm × 3.8cm	1.7kg
AT-FS713FC	29.5cm × 11.5cm × 4cm	.93kg
AT-FS716	33cm × 20.3cm × 3.8cm	2.1kg
AT-FS716L	24.9cm × 11.6cm × 3.6cm	.9kg
AT-FS716LE	33cm × 20.3cm × 3.8cm	2kg
AT-FS717FC	29.5cm × 11.5cm × 4cm	.93kg
AT-FS724L	43cm × 17.4cm × 4.3cm	2.5kg
AT-FS7009E	20.6cm × 10.9cm × 4.4cm	.8kg
AT-FS7016	33cm × 15.2cm × 4.4cm	1.9kg
AT-FS7024	44cm × 17.5cm × 4.4cm	2.6kg
AT-FS7109	29cm × 21cm × 4.4cm	1.9kg
AT-FS7109GB	29cm × 21cm × 4.4cm	1.9kg

FS7000 Series

Smart Switches
1st Generation



AT-FS7016

10/100TX × 16 ports

AT-FS7024

10/100TX × 24 ports

AT-FS7009E

10/100TX × 8 ports + 1 Gigabit port, external power supply

Common features of the FS7000 series

- RS232 terminal port for console management
- Auto MDI/MDI-X
- Supports the following software features:
 - Port mirroring
 - Port-based VLANs
 - Quality of Service (QoS)
 - Port trunking
 - Port Configuration

FS7100 Series

Smart Switches
2nd Generation

AT-FS7109

10/100TX × 8 ports + 1 Gigabit port

AT-FS7109GB

10/100TX × 8 ports + 1 Gigabit port + 1 GBIC

Common features of the FS7100 series

- Auto MDI/MDI-X
- Web-based management
- Supports the following software features:
 - Port mirroring
 - Port-based VLANs and 802.1Q
 - Quality of Service (QoS)
 - Port trunking
 - Port Configuration

3 Optical Networking

Transport & DTM

Wave Division Multiplexing (WDM)

Optical Transport technology is a key component of the Allied Telesyn Core Switching Solution required to build an efficient and future-proof Metropolitan Area Network. It allows

operators to meet their growing business and data networking needs by deploying cost-effective, scalable networks.

AT-WDI008 Gigabit Ethernet CWDM



AT-WDI008

CWDM x 1 port
GBIC bays x 8

Features

- 8 bi-directional wavelength CWDM system
- Up to 70km (depending on fibre quality)
- 8 bi-directional channels in one pair of fibre or 4 bi-directional channels using one fibre
- Bi-directional Channels in each fibre for OPEX reduction
- Up to 8 GBIC modules
- Expansion slot for the management module (optional)
- Expansion slot for redundant power supply (optional)
- Embedded MissingLink function
- SC connectors
- Universal 100-240V AC, 50/60Hz power supply
- -48VDC power supply option

Allied Telesyn standards-based

Gigabit Interface Converters (GBIC) modules

AT-G8T	1000T x 1 port	100m
AT-G8SX	1000SX x 1 port	550m
AT-G8LX10	1000LX x 1 port	10km
AT-G8LX25	1000LX x 1 port	25km
AT-G8LX40	1000LX x 1 port	40km
AT-G8LX70	1000LX x 1 port	70km

AT-WDI008 Expansion Modules

AT-WDRPS	Redundant power supply module
AT-WDM02	Management module
AT-WDFAN01	Fan module for AT-WDI008

AT-SP Series (for LX3800 series)

Small Form-factor Pluggables (SFP)

AT-SPSX	500m based on 50 micron mm fibre 300m based on 62.5 micron mm fibre
AT-SPLX10	10km based on 9 micron sm fibre
AT-SPLX40	40km based on 9 micron sm fibre
AT-SPZX80	80km based on 9 micron sm fibre

LX3800 Series LightExplorer Optical Transport Platform



AT-LX3800U

8-slot Multi-service chassis

AT-LX3811

Multi-rate line card

Features

- Multi-protocol transport
- Multi-rate from 100Mbps to 2.5Gbps
- Multiplex all 8 slots across a single fibre pair up to 80km

WaveGlider Series WaveGlider Passive CWDM Platform



AT-WG2300

Single Channel, CWDM OADM

AT-WG3300

4 Channel, CWDM Band Multiplexer

AT-WG4300

CWDM Wide Band Multiplexer

Features

- Increase network fibre capacity
- Efficient fibre relief
- Secure optical transport
- Protocol agnostic
- Supports up to 2.5Gbps per channel
- Small footprint
- Rackmountable

Model	Dimensions	Weight
AT-LX3800U	44cm x 46.6cm x 4.4cm	8.1kg
AT-LX3811	N/A	N/A
AT-WDI008	44cm x 30.5cm x 8.5cm	8.4kg
AT-WG2300	12.5cm x 14.1cm x 4.1cm	0.6kg
AT-WG3300	12.5cm x 14.1cm x 4.1cm	0.6kg
AT-WG4300	12.5cm x 14.1cm x 4.1cm	0.6kg

Two Year Warranty + 1 Year Net.Cover®

Basic Plus Support Program

4 Broadband Access & Aggregation

Carrier Class Ethernet Solutions

Telesyn's line of Carrier Class Ethernet Solutions include Multi-service Access Platforms for Triple Play service delivery to residential and business subscribers. Utilising copper and fibre native Ethernet interfaces, as well as various xDSL interfaces,

Telesyn products and solutions enable leading carriers worldwide to deploy advanced revenue generating services in xDSL, FTTx and Metro Ethernet networks.

Telesyn 9000 Series Multi-service Gigabit Ethernet Platform



Capacity 9700

Service module slots x 17
Control module slot x 2 CFC24, CFC56* (future)
Redundant network modules x 2



Capacity 9400

Service module slots x 7
Control module slot x 1 CFC24, CFC56*
Redundant network modules x 2

Common features of the 9000 series

Regulatory Approvals

- NEBS Level 3 Compliant: GR-1089, GR-63
- Safety: UL 1950
- EMC: FCC Part 15 Class A
- CE, VCCI compliant

QoS

- Wirespeed QoS per Port
- 4 Class of Service
- Input metering
- Input rate limiting, Output rate shaping

OAM&P

- All Cards Hot Pluggable
- Auto-provisioning
- Management via CLI, SNMP and Telesyn NMS

Standards

- IEEE 802.1d,w Rapid Spanning Tree
- IEEE 802.1Q, MEV (double tagging)
- IEEE 802.1p Traffic Class Expediting
- IEEE 802.3ad Link Aggregation
- IEEE 802.3ah Ethernet First Mile
- IETF RFC 1112 IP Multicasting / IGMP Snooping

The Telesyn 9000 Multi-service Gigabit Ethernet Platform leverages widely accepted Ethernet switching technology to bring an unparalleled price-to-performance ratio to the service provider's Metroedge™ networks. Whether your road to profitability is through a Fibre To The Home (FTTH) or xDSL residential market strategy, or Metro Ethernet business market strategy, the Telesyn 9000 is the perfect platform for your networking needs. This feature-rich, Multi-service Access Platform enables service providers to offer advanced, simultaneous 'Triple Play' services, such as high quality voice, tiered IP/Ethernet data services, and broadcast quality IP video. With the Telesyn 9000 a provider can deliver carrier-class Metro Ethernet services to enterprises of any size.

Telesyn 9000 interconnects geographically distributed multi-site corporations with ease and simplicity.

The Ethernet Protected Switched Ring (EPSR) feature enables the Telesyn 9000 series platforms to provide resiliency on the network side, allowing a larger number of Telesyn 9000 nodes to be deployed in a ring fashion with a failure switch-over time of less than 50msec.

Ordering Information

AT-TN250G	x700 Chassis Group with PEM, FAN, MAC
AT-TN250GF	x700 Chassis Group with PEM, FAN, MAC and filler plates (15)
AT-TN251G	x400 Chassis Group with PEM, FAN, MAC
AT-TN251GF	x400 Chassis Group with PEM, FAN, MAC and filler plates (6)
AT-TN102-A	Service Module, 10/100T x 10 ports
AT-TN104-A	Service Module, FX10FX, 1310nm, multi-mode, 2km
AT-TN107-A	Service Module, FX10LX, 1310nm, single-mode, 10km
AT-TN109-A	Service Module, FX10SF, single-mode, 10km, Single Fibre, Transmit 1550, Receive 1310 (Compatible with Residential Gateway)
AT-TN112-A	Service Module, ADSL2+ x 24 ports
AT-TN116-A	Service Module, G.SHDSL x 16 ports
AT-TN124-A	Service Module, ADSL2+ x 24 ports Annex B
AT-TN301-A	WAN Interface card, Gigabit Ethernet x 3 ports
AT-TN401B	CFC24, 24Gbps Control Module

* Check with your sales representative for availability

Broadband Access & Aggregation

Telesyn 7000 Series Multi-service Access Platform



Capacity 7700

Service module slots x 17 (ADSL x 272 ports)
Control module slot x 2 (6.4Gbps)
Redundant network modules x 2 (1Gbps)



Capacity 7400

Service module slots x 7 (ADSL x 112 ports)
Control module slot x 1 (6.4Gbps)
Redundant network modules x 2 1Gbps

Capacity 7100

Single rack unit
ADSL x 48 ports
Uplink ports 10/100 Gigabit Ethernet

Model	Dimensions	Weight
Telesyn 7100	44cm x 30cm x 4.4cm	4kg
Telesyn 7400	44cm x 30cm x 13cm	18kg
Telesyn 7700	44cm x 30cm x 40cm	27.2kg
Telesyn 9400	44cm x 30cm x 13cm	7kg
Telesyn 9700	44cm x 30cm x 40cm	15kg

Common features of the 7000 series

Regulatory Approvals

- NEBS Level 3 Compliant: GR-1089, GR-63
- Safety: UL 1950
- EMC: FCC Part 15 Class A

QoS

- Wirespeed QoS per Port
- 4 Class of Service
- IEEE 802.1p marking
- Classification by TOS
- Support for 4,000 VLANs

Subscriber Security

- Subscriber Filtering to eliminate 'Denial of Service' Attacks
- RFC 3046, DHCP Relay for IP management and law enforcement

OAM&P

- Auto-provisioning
- Management via CLI and SNMP
- Inband and out of band network management with Telesyn NMS

Standards

- IEEE 802.1d,w Rapid Spanning Tree
- IEEE 802.1Q, 4,000 VLAN support
- IEEE 802.1p Traffic Class Expediting
- IEEE 802.3ad Link Aggregation
- IETF RFC 1112 IP Multicasting / IGMP Snooping

The Telesyn 7000 series leverages widely accepted Ethernet switching technology to bring an unparalleled price-to-performance ratio to the service provider's access network.

The Telesyn 7000 series is a Family of Multi-service Access Platforms. These feature-rich platforms have been highly optimised for the video over xDSL application; they enable service providers to offer advanced, simultaneous 'Triple Play' services, such as high quality voice, tiered IP/Ethernet data services, and broadcast quality IP video. The platforms deliver ADSL2+ bandwidth at extremely long loops – ideal for rural deployments of advanced services. Migration to higher speed is as simple as a field upgrade of firmware to deploy 16Mbps and beyond. With features like theft prevention, real time statistic, advanced diagnostic and security, Telesyn 7000 ensures that deployments and resulting new revenue streams are continuous and without disruption.

Ordering Information

AT-TN100-A	ADSL16, ADSL Service Module x 16 ports
AT-TN101-A	ADSL8, ADSL Service Module x 8 ports with Integrated Splitters
AT-TN108-A	ADSL16, ADSL Service Module x 16 ports for Annex B support
AT-TN250G	x700 Chassis Group with PEM, FAN, MAC
AT-TN250GF	x700 Chassis Group with PEM, FAN, MAC and filler plates (15)
AT-TN251G	x400 Chassis Group with PEM, FAN, MAC
AT-TN251GF	x400 Chassis Group with PEM, FAN, MAC and filler plates (6)
AT-TN116-A	Service Module, GSHDSL x 16 ports
AT-TN300-A	GE1, 1000X (SFP Based) Network Module
AT-TN400-A	CFC6, 6.4Gbps Control Module
Telesyn 7100 fixed chassis platforms	
AT-TN7101	ADSL x 48 ports (without splitters)*
AT-TN7102	ADSL x 24 ports (with splitters)
AT-TN7103	ADSL x 16 ports (without splitters)*
AT-TN7104	ADSL x 8 ports (with splitters) (future)*
AT-TN7105	ADSL x 48 ports Annex B (without splitter)

* Check with your sales representative for availability

Allied Telesyn Application

The Foundation for Video Services over ADSL

Broadcast video bundled with Voice and Data over one copper telephone pair is a simple and scalable way to deliver the service at a price point competitive to cable and satellite companies. In order to truly compete with cable providers, the video service needs to be broadcast-quality and jitter-free. Networks Service Providers have an opportunity to capture some of these revenues.

By deploying a Video over ADSL solution, DSL becomes more than just a broadband pipe and is more attractive to the subscriber base because it allows customers access to the National broadcast TV as well as local channels, first run films and pay-per-view, Community TV and Video on demand.

Specifically, the following network requirements need to be met:

- Transport 100+ IP multicast MPEG/2 streams at 3.5Mbps to several remote sites with full QoS support
- Aggregate Internet traffic from all remote sites to different central offices
- The delivery of a minimum of two video channels to each customer site
- The delivery of ISP services to each customer site
- Loop length that can deliver more than 10Mbps over distances in excess of 3.5km
- Low ownership/deployment costs

Allied Telesyn has the right solution, its access, aggregation and core transport network infrastructure is significantly less expensive and more scalable than traditional ATM/SDH alternatives. The network can be deployed relatively quickly and will allow NSPs to demonstrate an impressive Return On Investment.

Allied Telesyn presents a full system solution for deploying IP Video over ADSL using its Ethernet-based products. In fact, Allied Telesyn offers the only end-to-end IP video solution available today. The three key network components are Allied Telesyn's multi-service broadband DTM core transport switches, Rapier 24i rate-limiting, Layer 3 aggregation switch/routers, and IP packet-based DSLAMs, which deliver IP over ADSL at the access edge.

Key Decision Factors

Reliability

Particularly in a carrier class network, it is imperative that networking products be manufactured to the highest quality standard.

Network Scalability

When making a large network upgrade, service providers want to leverage their investment for years to come with the ability to implement modular growth as necessary without the need for a forklift upgrade in the future.

Allied Telesyn's solution offers unparalleled scalability:

- 1Gbps equals 280 video streams at 3.5Mbps with MPEG2 encoding
- 2Gbps equals 560 video streams at 3.5Mbps with MPEG2 encoding
- 3Gbps equals 840 video streams at 3.5Mbps with MPEG2 encoding

Smooth Migration

When attempting to introduce leading edge technology such as Ethernet into legacy networks, it is important to have a non-disruptive migration strategy.

Network Management

Service providers rely on network management functionality to prevent bottlenecks. Effective circuit switch network architecture allows them to manage traffic via comprehensive QoS features

with a jitterless delivery mechanism, multicast distribution control, traffic engineer path control and bandwidth control for transport. Bandwidth allocation is to 512kbps increments. The jitter characteristics are matched only by more expensive SDH.

A Solution for Data as well as Video

In addition to video transmission, the high bandwidth ADSL offering allows the option of delivering high-speed broadband data service over the same ADSL pair.

Low Cost of Ownership/Deployment

Allied Telesyn's architecture is approximately 50 percent more cost-effective than any comparable ATM solution. Reduced training costs are also a benefit for an all IP-based solution.

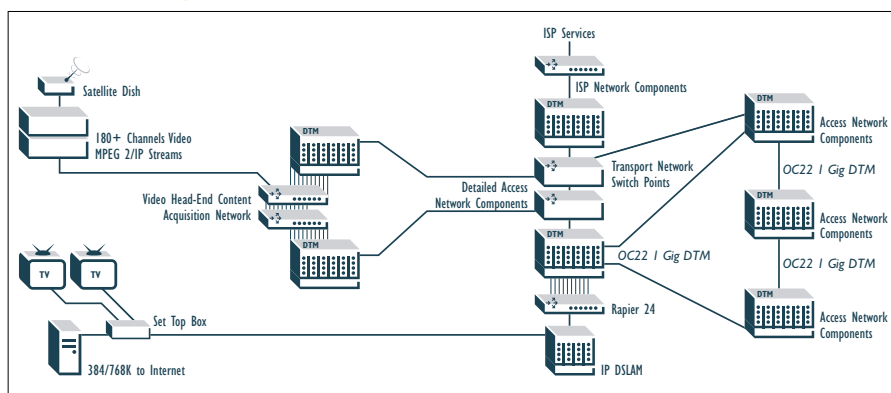
Local Channel Insertion

NSPs can insert their own affiliates into the video content very simply. There is no need to purchase additional equipment to support the local channel insertion capability as it is inherent in the DTM architecture at the core of the solution.

Video Extension

It is possible to move IP video to other networks without any IP addressing restrictions. As a result, it has been instrumental in the innovation of delivering bundled voice, video and data over standard copper telephone lines.

Model for Large Scale Video Distribution Network



Broadband Access & Aggregation

NM1000 Series DTM SWITCHES



AT-NM1365

Nimbra One Base Unit™ Switch for Metropolitan Networks

Bundle

- 1 x Control Module
- Blind panels
- 2 x -48vDC Filter Units
- 2 x Power Cable - 48vDC

AT-NM1365 trunk modules

- AT-NM1133/34** DTM 1000 Trunk Module.
Single-mode optics Short Haul
SH Left (A)/ Right (B)
- AT-NM1238/39** DTM 1000 Trunk Module.
Single-mode optics Long Haul
LH Left (A)/ Right (B)
- AT-NM1135/36** DTM Trunk Module
SDH/SONET. 622Mbps data,
single-mode SC connectors Left
(A)/ Right (B)
- AT-NM1622** DTM 622 Trunk Module
OC12-c/STM-4c. 1 SFP sold
separately
- AT-NM6221** SFP for DTM Trunk Module.
1310nm, 15Km

Model	Dimensions	Weight
AT-NM1365	44.4cm x 48.2cm x 26cm	15kg

* Check with your sales representative for availability

AT-NM1365 access modules

- AT-NM1011/12** 8 x ports EI Access Module.
2048Mbps data, 120 ohm, RJ48
connectors, Left (A)/ Right (B)
- AT-NM1015/16** 8 x ports Ethernet Module.
10/100TX RJ45 connectors Left
(A)/ Right (B)
- AT-NM1021** Gigabit Ethernet Access Module.
- AT-NMSFP/SX-00** Gigabit Ethernet SFP for NM1021.
* OC-3/STM-1 Access Module.
4 x SFP option, VC-4/STS-3c,
SPE capable.
* OC-3/STM-1 Access Module, 4
x SFP option, VC-4/STS-3c.
CPE capable, Stramtum
3/GG.813 option 1 clock

NM1000 series licenses

- AT-NM1311** DTM multicast software license
- AT-NM1223** 220V AC/-48vDC power inverter
- AT-NM1911** Nimbra vision server software
license
- AT-NM1912** Nimbra vision node software
license

NM200 Series DTM SWITCHES



AT-NM1290

290 DTM Switch

Features

- 120-240V AC
- 8 x DTM ports
- 1Gbps data each
- Single-mode optics
- Short haul SC connectors

Model	Dimensions	Weight
AT-NM1290	88cm x 44.5cm x 30cm	5kg
AT-NM1291	88cm x 44.5cm x 30cm	5kg
AT-NM1292	88cm x 44.5cm x 30cm	5kg



AT-NM1291

290 DTM Switch

Features

- -48vDC
- 1 x port OC-48/STM-16
- 5 x DTM ports
- 1Gbps data each
- Short haul

AT-NM1292

290 DTM Switch

Features

- 120-240V AC
- 8 x DTM ports
- 1Gbps data each
- Single-mode optics
- 4 long haul & 4 short haul
- SC connectors

DTM network solutions are based on open standards, such as IEEE, SONET/SDH and SMPTE/CENELEC standards, for seamless inter-working with legacy equipment, enabling a migrational path to better services. Lacking in the legacy technologies are mechanisms to handle QoS (especially for packet transport) and service provisioning/integration in an efficient way.

These contributions are 'service enhancement' sort of functions that introduce among other features:

- 100% QoS for all offered services (including packet services)
- One step end-to-end service provisioning
- Flexible bandwidth management
- Multi-service integration

The NM1000 series uses the new, and already partly ETSI standardised, DTM technology as the enabler of enhanced services. DTM (Dynamic Synchronous Transfer Mode) addresses a number of the problems that has arisen within the new world of multi-service broadband networking.



5 Security Appliances & Routers

Allied Telesyn's AR- series of WAN and Internet Multi-service Access Products include solutions for PSTN, ISDN and xDSL, as well as T1/E1, frame relay and leased-line connections.

With the industry's most comprehensive hardware and software features sets for this class of router; including the AT-Firewall Stateful Inspection Firewall, AR series routers are able to deliver precisely the breadth of functionality that small and mid-sized businesses require, at price points they can afford, and with the reliability that makes Allied Telesyn a trusted networking partner.

Security

The Allied Telesyn line of security products is intended to be the security solution of choice for organisations looking to enhance their network security architecture with leading security products and solutions. The ability to provide, from

one vendor, best of breed security solutions that address multiple areas of information security is highly desired in today's fast-paced market.

For High Security Routers see pg 32

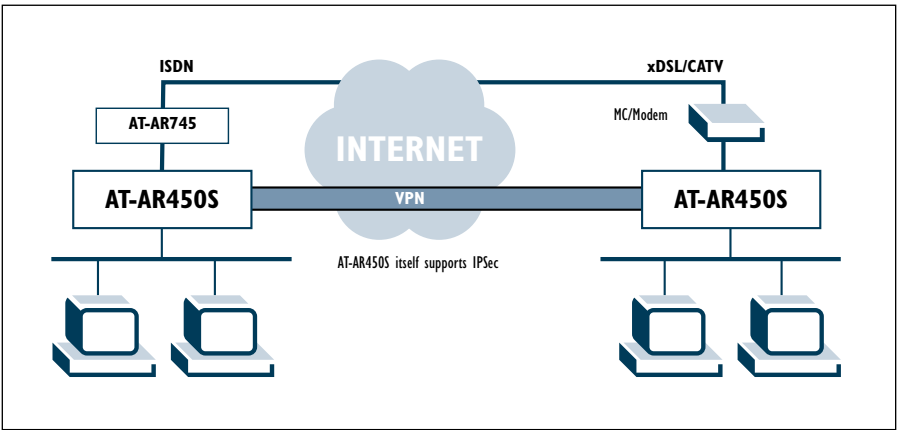
Quality of Service (QoS)

Allied Telesyn's advanced software QoS allows our AR400 series and AR700 series of routers to address the QoS needs of today's and tomorrow's networks. The Allied Telesyn QoS implementation enables these routers to dynamically identify high priority voice, video, and application traffic, so that appropriate service levels can be maintained in congested networks. The advanced QoS on our routers enables voice and data traffic to travel over IPSec tunnels, Frame Relay, PPP, Ethernet and ATM interfaces, as well as IPv6 to IPv4 tunnels.

Example:

Virtual Private Network

The AT-AR450S can be utilised in broadband services such as FTTH/O, ADSL and CATV by its high performance. For example, a service based on 100M FTTH. The service using PPPoE as its authorisation and provides several global IP addresses so that customers could open their servers to the Internet. Ethernet1 port could be used as a DMZ port to isolate the DMZ from the private network and to make the private network secure.



Router Selector

Modular Enterprise routers			
Multi-protocol routing >>>	AT-AR725 >>>	10/100TX x 2 port Async x 2 ports (RJ45) PIC card x 2 bays (fixed) 128MB RAM Support up to 512MB SDRAM 16MB Flash on Board Support up to 192MB Compact Flash	32
Multi-protocol routing with Network Service Module >>>	AT-AR745 >>>	10/100TX x 2 ports Async x 2 ports (RJ45) PIC card x 2 bays (fixed) Supports Network Service Module (NSM) 128MB RAM Support up to 512MB SDRAM 16MB Flash on Board Support up to 192MB Compact Flash	32
Mid-range network access router			
Multiple Ethernet,VLAN support & choice of WAN interfaces >>>	AT-AR410 >>>	10/100TX x 5 ports Async/console x 1 port PIC card x 1 bay	33
Broadband cable/DSL routers			
Annex A ADSL Modem >>>	AT-AR210 >>>	USB x 1 port ADSL (Annex A) x 1 port (RJ-11)	35
Annex B ADSL Modem >>>	AT-AR215 >>>	USB x 1 port ADSL (Annex B) x 1 port (RJ45)	35
For use with external modem >>>	AT-AR220E >>>	10T x 1 port (RJ45) 10/100TX x 4 ports (RJ45)	35
	AT-AR221E >>>	10/100TX x 1 port (RJ45) 10/100TX x 4 ports (RJ45)	35
ADSL router/modem >>>	AT-AR240E >>>	10T x 1 port (RJ45) ADSL (Annex A) x 1 port (RJ-11)	35
ADSL bridge router >>>	AT-AR250E >>>	10/100TX x 4 ports (RJ45) ADSL (Annex B) x 1 port (RJ-11)	34
	AT-AR255E >>>	10/100TX x 4 ports (RJ45) ADSL (Annex B) x 1 port (RJ-11)	34
	AT-AR267 >>>	10/100TX x 1 port (RJ45) ADSL x 1 port (RJ-11) USB x 1 port Console x 1 port ISDN BRI x 1 port	34

Security Selector

Medium/large Enterprise - high end security appliances			
Broadband security router >>>	AT-AR450S >>>	10/100TX x 5 ports LAN 10/100TX x 1 port WAN 10/100TX x 1 port DMZ Async x 2 ports	36
Small/branch office security appliances			
ADSL Annex A Branch Office router >>>	AT-AR440S >>>	10/100TX x 5 ports/DMZ ADSL (Annex A) x 1 port Async x 1 port PIC card x 1 bay	36
ADSL Annex B Branch Office router >>>	AT-AR441S >>>	10/100TX x 5 ports/DMZ ADSL (Annex B) x 1 port Async x 1 port PIC card x 1 bay	36
SHDSL router >>>	AT-AR442S >>>	10/100TX x 5 ports/DMZ 2/4 wire G.SHDSL x 1 port Async x 1 port PIC card x 1 bay	36
Multiple Ethernet,VLAN support & choice of WAN interfaces >>>	AT-AR410S >>>	10/100TX x 4 ports LAN 10/100TX x 1 port WAN Async/console x 1 port PIC card x 1 bay IPSec Accelerator Security Appliance	37
Dual Ethernet with encryption accelerator,>>> Stateful Inspection Firewall & SSH	AT-AR320 >>>	10T x 2 ports Async x 2 ports	37
	AT-AR320S >>>	10T x 2 ports Async x 2 ports IPSec Accelerator	37

Security Appliances



Our comprehensive service and support plans designed to protect your network investments well into the future.

See pgs 62-66 for details

AR700 Series Modular Enterprise Routers



AT-AR725

10/100TX x 2 port
Async x 2 ports (RJ45)
PIC card x 2 bays (fixed)
128MB RAM
Support up to 512MB SDRAM
16MB Flash on Board
Support up to 192MB Compact Flash

Features

- High performance RISC processor
- Flexible configuration with slide-in PICs
- Security services
- Hardware encryption and compression option
- Cost-effective upgrade as network requirements change
- Multi-protocol routing including: RIPv1/v2 and OSPFv2
- IPv6 optional
- Stateful Inspection Firewall option
- IPSEC/ISAKMP VPN option
- DHCP
- DNS
- IEEE 802.1x
- GRE

Two Year Warranty + 1 Year Net.Cover®
Basic Plus Support Program



AT-AR745

10/100TX x 2 ports
Async x 2 ports (RJ45)
PIC card x 2 bays (fixed)
Supports Network Service Module (NSM)
128MB RAM
Support up to 512MB SDRAM
16MB Flash on Board
Support up to 192MB Compact Flash

Features

- High performance RISC processor
- PCI-bus slide-in Network Service Module (NSM)
- Supports up to 6 Port Interface Cards (PICs) with NSM module
- Wide range WAN and LAN interfaces
- Hardware encryption and compression option
- -48vDC version for Telco applications
- Ultra compact 19", 1U rackmount design
- IPv6 optional
- DHCP
- DNS
- IEEE 802.1x
- GRE

Two Year Warranty + 1 Year Net.Cover®
Basic Plus Support Program

Model	Dimensions	Weight
AT-AR725	44cm x 33cm x 4.4cm	4.5kg
AT-AR745	44cm x 33cm x 4.4cm	4.8kg

AT-AR745 Network Service Module (NSM)

AT-AR040 NSM for 4 PICs *
AT-AR041 NSM with 8 BRI ports (S/T)
AT-AR042 NSM with 4 BRI ports (S/T)

AR700 series software and internal hardware-enabled encryption and compression cards
See Hardware Enabled Encryption and Compression Cards on page 45.

AR700 series Port Interface Cards (PICs)

AT-AR020 E1/T1 PRI integral CSU/DSU x 1 port *
AT-AR021 ISDN BRI x 1 port (S/T)
AT-AR023 Sync x 1 port (2Mbps) Frame Relay, X.25 - (cabling required)
AT-AR024 Async x 4 ports (4 x 115kbps)
AT-AR026 10/100TX switch x 4 ports (Layer 2 switch)
AT-AR027 2 port VoIP FXS

Redundant Power Supply option

AT-AR740RPS External redundant power supply

Memory Upgrade option

AT-CF128A 128MB Compact Flash
AT-SD256A 256MB SDRAM

* Only 2 x AT-AR020 (E1/T1) supported in AT-AR040

Sync Cabling available for the AR700 series

AT-X.21-DTE Cable
AT-X.21-DCE Cable
AT-RS232-DTE Cable
AT-RS232-DCE Cable
AT-V.35-DTE Cable
AT-V.35-DCE Cable

AlliedWare™

The AR700 series ship with Full Layer 3 software. Advanced Layer 3 and Security pack option available. Please see technical specification details and ordering p/n on page 46.

AT-AR410 Mid-Range Network Access Router



AT-AR410

10/100TX x 5 ports

Async/console x 1 port

PIC card x 1 bay

Two Year Warranty + 1 Year Net.Cover®

Basic Plus Support Program

Model	Dimensions	Weight
AT-AR410	30cm x 19cm x 4.5cm	1.8kg

Features

- E1, T1, PRI, BRI, Sync, Frame Relay, Leased Line, VoIP, Async option
- Multi-protocol routing including: RIP v1/v2 and OSPFv2
- DHCP, SMTP, IGMP, IGMPv2 and RSVP support included
- Up to 256 VPN tunnels
- Branch office access to corporate network or WAN
- VLAN support
- IPv6 optional
- Small to medium office Internet access
- Protects against 'Denial of Service' attacks
- Security services
- DES encryption support
- Stateful Inspection Firewall optional
- Optional SSH
- Optional hardware VPN
- Optional 3DES encryption support
- Chip & PIN support *
- BGP-4 (optional)
- IEEE 802.1x
- GRE
- SNMPv1
- SNMPv2
- SNMPv3

* Check with your sales representative for availability

AT-AR410 Port Interface Cards (PICs)

AT-AR020	E1/T1 PRI x 1 port
AT-AR021	ISDN BRI x 1 port (U & S/T)
AT-AR023	Sync x 1 port (2Mbps) Frame Relay, X25 - (cabling required)
AT-AR024	Async x 4 ports (4 x 115kpbs)
AT-AR027	2 port VoIP FXS

Sync Cabling available for the AT-AR410

AT-X.21-DTE Cable
AT-X.21-DCE Cable
AT-RS232-DTE Cable
AT-RS232-DCE Cable
AT-V.35-DTE Cable
AT-V.35-DCE Cable

AlliedWare™

The AT-AR410 ships with Full Layer 3 software. Advanced Layer 3 and Security pack option available. Please see technical specification details and ordering p/n on page 46.

Security Appliances



Our comprehensive service and support plans designed to protect your network investments well into the future.

See pgs 62-66 for details

AR200 Series Broadband Cable/DSL Routers

AT-AR267

10/100TX x 1 port (RJ45)
ADSL x 1 port (RJ-11)
USB x 1 port
Console x 1 port
ISDN BRI x 1 port

Features

- Browser-based GUI
- Dynamic Host Configuration Protocol (DHCP)
- Dynamic IP address assignment
- Euro ISDN, BRI (S/T)
- Full rate ADSL G.DMT, up to 8Mbps downstream and 1Mbps upstream
- Supports G.Lite ADSL up to 1.5 Mbps downstream and 512kbps upstream
- Flash upgradeable
- Global IP address pool on ADSL port
- High speed ADSL connectivity with ISDN backup
- ICSA-certified Stateful Inspection Firewall (optional)
- Integral 4 port switch
- IP multi-homing
- IPSec operation (option)
- L2TP LAC/LNS
- Network Address Translation (NAT)
- Optional hardware accelerator for DES/3DES encryption
- Port-based VLAN support
- SNMP support
- USB port



AT-AR250E

ADSL Router (Annex A)
10/100TX x 4 ports (RJ45)
ADSL x 1 port (RJ-11)

Features

- Supports Annex A - ADSL
- Integral 4-port 10/100TX switch

AT-AR255E

ADSL Router (Annex B)
10/100TX x 4 ports (RJ45)
ADSL x 1 port (RJ-11)

Features

- Supports Annex B - ADSL over EURO-ISDN
- Integral 4-port 10/100TX switch

Common features of the AR250E series

- Full rate ADSL G.DMT, up to 8Mbps downstream and 1Mbps upstream
- Supports G.Lite ADSL up to 1.5Mbps downstream and 512kbps upstream
- Single IPSec, PPTP, L2TP
- VPN passthrough
- Built-in Stateful Inspection Firewall
- Intrusion Detection System protects against 'Denial of Service' attacks
- Dynamic Port Opening for gaming and audio/video applications
- Global IP Address pool supported on WAN port
- Network Address Translation (NAT), no-NAT also supported
- DHCP Server/Relay
- DNS Proxy
- Simultaneous USB and Ethernet operation (routed)
- PPP over Ethernet (PPPoE), PPP over ATM (PPPoA)
- Bridged Ethernet over ATM (RFC1483)
- Classical IP, IP over ATM
- Browser Based GUI with on-line 'Help'
- Flash upgrade
- Default Switch

Two Year Warranty

Model	Dimensions	Weight
AT-AR250E	17cm x 3.5cm x 11.5cm	.3kg
AT-AR255E	17cm x 3.5cm x 11.5cm	.3kg
AT-AR267	26cm x 18cm x 3.8cm	.5kg

AR200 Series Broadband Cable/DSL Routers



AT-AR240E

ADSL Router (Annex A)
10T x 1 port (RJ45)
ADSL x 1 port (RJ-11)
USB x 1 port

Features

- Supports Annex A - ADSL
- Full rate ADSL G.DMT, up to 8Mbps downstream and 1Mbps upstream
- Supports G.Lite ADSL up to 1.5Mbps downstream and 512kbps upstream
- Single IPsec, PPTP, L2TP
- VPN passthrough
- Built-in Stateful Inspection Firewall
- Intrusion Detection System protects against 'Denial of Service' attacks
- Dynamic Port Opening for gaming and audio/video applications
- Global IP Address pool supported on WAN port
- Network Address Translation (NAT), no-NAT also supported
- DHCP Server/Relay
- DNS Proxy
- Simultaneous USB and Ethernet operation (routed)
- PPP over Ethernet (PPPoE), PPP over ATM (PPPoA)
- Bridged Ethernet over ATM (RFC1483)
- Classical IP, IP over ATM
- Browser Based GUI with on-line 'Help'
- Flash upgrade
- Default Switch

Two Year Warranty

AT-AR221E

10/100TX x 1 port (RJ45)
10/100TX x 4 ports (RJ45)

Features

- Allows multiple users to access the Internet at the same time via a single public IP Address using NAT
- Built-in Stateful Inspection Firewall to protect PCs from outside intruders
- Supports PPPoE and PPTP allowing users to seamlessly connect to ISPs with the user familiar 'dial-up' type connection interface
- Supports DHCP client to receive both a dynamic IP address and a fixed IP address from ISP
- Built-in DHCP server to automatically assign and manage LAN IP addresses
- Allows external Internet users to access information from an integral target host using the Virtual Server option
- Provides unrestricted two-way communication between one PC on the LAN and certain Internet services like conferencing, video and gaming applications
- Supports UPnP
- Supports SNMP Management



AT-AR220E

10T x 1 port (RJ45)
10/100TX x 4 ports (RJ45)

Features

- Supports up to 253 LAN users
- External MDI/MDI-X switch
- Supports PPP over Ethernet (PPPoE)
- Virtual server support
- Integral 4-port 10/100TX switch
- DNS Proxy support
- Network Address Translation (NAT)
- DHCP for simple IP address assignment
- DMZ support
- Support PPTP protocol
- External power connector

Two Year Warranty



AT-AR210

USB ADSL Modem (Annex A)
USB x 1 port
ADSL x 1 port (RJ-11)

Features

- Supports Annex A - ADSL

AT-AR215

USB ADSL Modem (Annex B)
USB x 1 port
ADSL x 1 port (RJ45)

Features

- Supports Annex B - ADSL over ISDN

Common features of the AT-AR210 and AT-AR215

- Convenient and affordable
- Up to 8Mbps downstream over existing telephone lines
- Simple installation: USB Plug & play
- No external power supply required (USB powered)
- All major PC operating systems supported
- Auto-install with automatic PC o/s detection
- Supports Full-rate G.DMT as well as G.Lite
- PPP over ATM (PPPoA)
- PPP over Ethernet (PPPoE)
- Bridged Ethernet over ATM (RFC1483)
- Routed IP over ATM (RFC1483)

Two Year Warranty

Model	Dimensions	Weight
AT-AR210	12cm x 8.4cm x 2.4cm	.15kg
AT-AR215	12cm x 8.4cm x 2.4cm	.15kg
AT-AR220E	17cm x 10cm x 3.1cm	.5kg
AT-AR221E	14.1cm x 11.2cm x 2.6cm	.5kg
AT-AR240E	17cm x 3.5cm x 11.5cm	.3kg

High Security Appliances



Our comprehensive service and support plans designed to protect your network investments well into the future.

See pgs 62-66 for details

AT-AR450S Medium/Large Enterprise



AT-AR450S

Secure VPN + Firewall Router for SME
10/100TX x 5 ports LAN
10/100TX x 1 port WAN
10/100TX x 1 port DMZ
Async x 2 ports

IPSEC Authentication

- SHA-1
- MD5
- PKI

Routing Protocols

- OSPF
- BGP4 optional
- RIPv1 and RIPv2
- IPv6 optional
- VRRP (optional)

Multicast Protocol

- DVMRP
- PIM-SM, PIM-DM

Advanced Traffic Capabilities

- GRE
- Loadbalancing optional
- IP Multihoming

Features

- Stateful Inspection Firewall
- 511 IPSEC/ISAKMP VPN
- Hardware based AES 3DES DES encryption
- Intrusion Detection and Attack Alert System
- Support Windows XP, 2000 VPN clients using pre-shared keys and X509 certificates
- L2TP
- PPP over Ethernet (PPPoE)
- Protects against 'Denial of Service' attacks
- PAP/CHAP user authentication
- RADIUS/TACAS+ look-up
- SMTP and HTTP Proxy
- SSH SSL
- IEEE 802.1Q tagged VLAN support
- 4 priority QoS traffic classes
- 64 VLANs
- GRE
- IEEE 802.1x
- DHCP
- DNS

Two Year Warranty + 1 Year Net.Cover®
Basic Plus Support Program

High Security Router

The Allied Telesyn AT-AR450S is an enterprise-class security appliance offering versatility, integration, performance and security for medium business and enterprise networks. With on board hardware encryption the AT-AR450S offers DES-3DES and AES (Advanced Encryption Standard) hardware encryption delivering up to 65Mbps of 3DES VPN + NAT and Firewall throughput and 40Mbps of AES-256 VPN + NAT and Firewall throughput.

Performance

Concurrent Sessions (Firewall NAT)	18,000
# Policies	1024
Firewall/NAT PPPoE throughput	up to 100Mbps
VPN IPsec (3DES) + Firewall	up to 65Mbps
VPN IPsec (AES) + Firewall	up to 65Mbps



Model	Dimensions	Weight
AR440S series	35.5cm x 20cm x 4.5cm	.33kg
AT-AR450S	26cm x 18cm x 3.8cm	1.7kg

AR440S Series Branch Office Routers



AT-AR440S

10/100TX x 5 ports/DMZ
ADSL (Annex A) x 1 port
Async x 1 port
PIC card x 1 bay

Two Year Warranty + 1 Year Net.Cover®
Basic Plus Support Program



AT-AR441S

10/100TX x 5 ports/DMZ
ADSL (Annex B) x 1 port
Async x 1 port
PIC card x 1 bay

AT-AR442S*

10/100TX x 5 ports/DMZ
2/4 wire G.SHDSL x 1 port
Async x 1 port
PIC card x 1 bay

Common features of the AT-AR440S, AT-AR441S and AT-AR442S

- Stateful Inspection Firewall
- PPP and IP routing
- RIPv1/v2
- DHCP
- OSPF
- BGP-4 (requires licence)
- Multi-layer QoS*
- IPSEC/ISAKMP VPN option
- Supports DES, 3DES and AES encryption
- IEEE 802.1x
- IEEE 802.1Q Tagged VLAN
- Industry leading multicast support (optional)
- IPv6 option

* Check with your sales representative for availability

High Security Appliances

AT-AR410S SMB/Branch Office



AT-AR410S

10/100TX x 4 ports LAN
10/100TX x 1 port WAN
Async/console x 1 port
PIC card x 1 bay
IPSec Accelerator
Security Appliance

Two Year Warranty + 1 Year Net.Cover®
Basic Plus Support Program

AlliedWare™

The AT-AR410S ships with Full Layer 3 software.
Advanced Layer 3 option available. Please see
technical specification details and ordering p/n on
page 46.

Features

- 254 VPN (IPSEC/ISAKMP)
- Hardware based DES and 3DES encryption
- Stateful Inspection Firewall
- Attack Alert System
- Supports Windows XP, 2000 VPN clients using pre-shared keys and X509 certificates
- L2TP
- PPP over Ethernet (PPPoE)
- Protects against 'Denial of Service' attacks
- PAP/CHAP user authentication
- RADIUS/TACAS+ look-up
- SMTP and HTTP Proxy
- SSH SSL
- 1 PIC WAN (ISDN BRI/PRI/E1, Frame Relay, X25, Leased Line, VoIP FXS)
- BGP-4 (optional)
- IEEE 802.1x
- GRE
- SNMPv1
- SNMPv2
- SNMPv3

* Check with your sales representative
for availability

The AT-AR410S software and internal hardware-enabled encryption and compression cards

See Hardware Enabled Encryption and
Compression Cards on page 45.

AT-3DES Triple DES/SW
- requires encryption card

AT-AR410S Port Interface Cards (PICs)

AT-AR020 E1/T1 PRI x 1 port
AT-AR021 ISDN BRI x 1 port (U & S/T)
AT-AR023 Sync x 1 port (2Mbps) Frame
Relay, X.25 - (cabling required)
AT-AR024 Async x 4 ports (4 x 115kpbs)
AT-AR027 2 port VoIP FXS

Sync Cabling available for the AT-AR410S

AT-X.21-DTE Cable
AT-X.21-DCE Cable
AT-RS232-DTE Cable
AT-RS232-DCE Cable
AT-V.35-DTE Cable
AT-V.35-DCE Cable

AT-AR320 Teleworker/SOHO



AT-AR320

Dual Ethernet security appliance

AT-AR320S

Dual Ethernet security appliance with
VPN encryption accelerator
10T x 2 ports
Async x 2 ports

Two Year Warranty + 1 Year Net.Cover®
Basic Plus Support Program

Features

- 60 VPN (IPSEC/ISAKMP) (AT-AR320S only)
- Hardware based DES and 3DES encryption (AT-AR320S only)

Common features of the AT-AR320

- Stateful Inspection Firewall
- Attack Alert System
- Supports Windows XP, 2000 VPN clients using pre-shared keys and X509 certificates
- L2TP
- PPP over Ethernet (PPPoE)
- Protects against 'Denial of Service' attacks
- PAP/CHAP user authentication
- RADIUS/TACAS look-up
- SMTP and HTTP Proxy
- AlliedWare OS (see pg 45 AT-AR450S ICSA LAB Certified*)

Model	Dimensions	Weight
AT-AR320	26cm x 18cm x 3.8cm	1.7kg
AT-AR410S	30cm x 19cm x 4.5cm	1.8kg



6 Residential Gateway

The infrastructures of the Internet and corporate Intranets are constantly being upgraded. The market is wide open for service providers ready to deliver high-speed access and applications. A growing demand for broadband traffic combining video, voice and data is revealing. There is an urgent need for a single, cost-effective unit that offers a full suite of services simply and cost-effectively to subscribers.

The answer is the AT-Residential Gateway, an integrated voice/video/data device offering inter-connectivity to local

devices, and access and connectivity services to an external broadband network. When Triple Play is offered, the AT-RG can expertly provide all functions through one device. The PCs for the Internet access, the VoIP for analogue or ISDN phone and the STB for video can all be serviced from the RG.

Using the Zero Touch Configurator designed by Allied Telesyn, a network of Residential Gateway can be easily configured, provisioned and deployed in the residence.

ZTC Zero Touch Configurator

AT-ZTC500

Zero Touch Configurator up to 500 users

AT-ZTCUPGRADE

Zero Touch Configurator upgrade to unlimited users version

AT-ZTCUNLIMITED

Zero Touch Configurator unlimited users version

Fibre application

SH (single-mode) version

LH (multi-mode) version

Copper application

TX version

Common features of the ZTC series

- Support for RG200 and RG600 series device
- Multi-protocol (TFTP, HTTP, HTTPS)
- Support for High Availability and Fault Tolerance
- Horizontal and vertical scalability
- Flexibility
- Security and user profiling
- Creation of views on configuration data
- Minimum requirement Pentium 3 or similar CPU
- 256MB RAM (512MB recommended)
- 20GB Hard disk
- OS - Linux Red Hat 7.2 or Suse 8.1

Residential Gateway Products & Components

Passive Part

AT-RG001 Fibre Outlet (10 pieces)

Splice Fibre Outlet Kit

AT-RG010 Single-mode Fusion Splice

AT-RG011 Multi-mode Fusion Splice

AT-RG020 Single-mode Mechanical Splice

AT-RG021 Multi-mode Mechanical Splice

Accessories

AT-RG005 Battery Back Up

AT-RG006 Battery Back Up Cable

AT-RGCONSOLECABLE

Residential Gateway

RG600 Series Residential Gateway



AT-RG623

10/100TX or SH/LH x 1 WAN port
10/100TX x 3 Eth. ports
ISDN BRI x 1 port

AT-RG623BD

10/100BX x 1 WAN port
10/100TX x 3 Eth. ports
ISDN BRI x 1 port

AT-RG613

10/100TX or SH/LH x 1 WAN port
10/100TX x 3 Eth. ports
FXS x 2 ports



AT-RG624A/634A

ADSL x 1 port (RJ-11) Annex A
10/100TX x 4 Eth. port
FXS x 2 ports (RG634 only)

AT-RG624B/634B

ADSL x 1 port (RJ45) Annex B
10/100TX x 4 Eth. ports (RJ45)
FXS x 2 ports (RJ-11)

Two Year Warranty

AT-RG644A

ADSL x 1 WAN port Annex A
10/100TX x 4 Eth. ports (RJ45)
ISDN LT-S BRI x 1 port

AT-RG644B

ADSL x 1 WAN port Annex B
10/100TX x 4 Eth. ports (RJ45)
ISDN LT-S BRI x 1 port

AT-RG656BD/SH

100FX x 1 SMDi WAN port
10/100TX x 6 Eth. ports (RJ45)
FXS x 3 ports

Common features of the RG600 series

- Tag based IEEE 802.1Q VLAN support
- Layer 2 and Layer 3 QoS
- IGMP snooping and proxying
- PPPoE protocol support
- DHCP client, server and relay support
- UpnP IGD profile support and NAT traversal
- Network Address Translation (NAT)
- Stateful Inspection Firewall
- H.323, SIP, MGCP protocol support
- G.711, G.726, G.729 and G.723 (optional)
- T.38 fax operation
- External Power Supply
- External Battery Backup support (optional)

Model	Dimensions	Weight
RG120 series	19.8cm x 14.9cm x 4.6cm	.45kg
AT-RG213	19.8cm x 14.9cm x 4.6cm	.45kg
AT-RG613/623SH/LH	23.5cm x 5cm x 14.4cm	.45kg
AT-RG613/623TX	19.8cm x 14.9cm x 4.6cm	.45kg
AT-RG624A/634A	19.8cm x 14.9cm x 4.6cm	.45kg
AT-RG624B/634B	19.8cm x 14.9cm x 4.6cm	.45kg
AT-RG644A/B	19.8cm x 14.9cm x 4.6cm	.45kg
AT-RG656BD	19cm x 6cm x 29.4cm	2.14kg

RG200 Series Residential Gateway AT-RG213

10/100TX or FX x 1 WAN port
10/100TX x 3 Eth. ports
FXS x 2 ports
PSTN x 1 line port

Features

- IGMP v1/v2 Multicast support
- Tag based IEEE 802.1Q VLAN support
- Codec include G.711, G.723 and G.729 (optional)
- L2TP access concentrator
- H.323, SIP, MGCP/NCS protocol support

Two Year Warranty

RG120 Series Residential Gateway

AT-RG121/124LH

10/100FX x 1 WAN port (single-mode)
10/100TX x 1 Eth. port (AT-RG121LH)
10/100TX x 4 Eth. ports (AT-RG124LH)

AT-RG121/124SH

10/100FX x 1 WAN port (multi-mode)
10/100TX x 1 Eth. port (AT-RG121SH)
10/100TX x 4 Eth. ports (AT-RG124SH)

Common features of the RG120 series

- Wirespeed technology
- Auto-negotiation ports
- Auto MDI/MDI-X ports
- Transparent to VLAN packets
- Single and multi-mode fibre options
- External power supply
- Locking power connector

Two Year Warranty



7 Voice over IP



IP telephony

VoIPtalk™ is Allied Telesyn's Voice over IP networking solution for the enterprise, scaling from the smallest remote office to the busiest central site. VoIPtalk™ components include telephone/IP gateways, PSTN/IP gateways and the management software required to control the operation of these networks. VoIPtalk™

is designed to dramatically reduce telecommunications costs, since calls are re-routed through data networks instead of standard telephone networks. Outlay is minimal as VoIPtalk™ fully utilises existing telecommunications equipment and IP data networks. VoIPtalk™ products interwork seamlessly with Allied Telesyn's comprehensive range of wide area network routers.

AT-VP500 SIP Server Software

The AT-VP500SIPSERVER is a SIP redirect server designed to provide connectivity between IP Telephony endpoints in networks composed of VoIPtalk™ units. It uses the SIP (Session Initiation Protocol) protocol, which is a simple signalling protocol for Internet conferencing and telephony.

AT-VP500SIPSERVER allows a Network Manager to administer a VoIP network running VoIPtalk™ units from one central location. It supports the following Class 5 services :

- Call Display
- Call Waiting
- Visual call waiting
- Call forwarding
 - Busy
 - No answer
 - Preferred
- Speed Dialing
- Call transfer

AT-VP500SIPSERVER020

Software license for 20 users

AT-VP500SIPSERVER040

Software license for 40 users

AT-VP500SIPSERVER120

Software license for 120 users

AT-VP500SIPSERVERMX

Software license unlimited users license

AT-VP500 Unit Network Manager

Unit Network Manager for the VP600 series is a user friendly element management system designed to facilitate the deployment, configuration and provisioning of Allied Telesyn VoIP access device and gateways.

AT-VP500UNM020

To manage up to 20 devices

AT-VP500UNM040

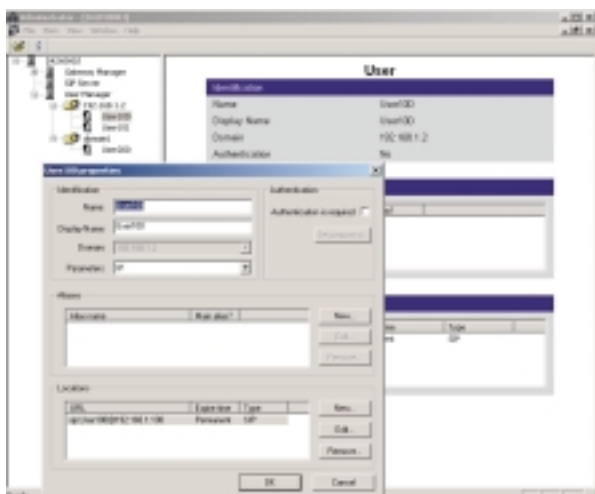
To manage up to 40 devices

AT-VP500UNM120

To manage up to 120 devices

AT-VP500UNMMX

To manage up to 1000 devices



VP600 Series IP Telephony/Voice over IP



AT-VP604E FXS

10/100TX x 1 port (RJ45)
FXS x 4 ports (RJ-11)
PSTN bypass x 1 port (RJ-11)

Features

- Supports up to four attached analogue devices i.e. phone, G3 fax, modem
- Supports standard vocoders G.711 (A-law, μ -law), G.723.1, G.729 a,b,e
- PSTN bypass in event of power failure
- Country-specific dial and busy tones

Model	Dimensions	Weight
AT-VP604E FXS	26cm x 18cm x 5.5cm	.6kg
AT-VP604E FXO	26cm x 18cm x 5.5cm	.6kg
AT-VP624E FXS	43cm x 21cm x 4.4cm	1.7kg

AT-VP604E FXO

10/100TX x 1 port (RJ45)
FXO x 4 ports (RJ-11)

Features

- Supports up to four analogue PSTN lines
- Supports standard vocoders G.711 (A-law, μ -law), G.723.1 (5.3kbps and 6.4kbps)
- Real-time Transport Protocol (RTP) for voice streaming
- Differentiated Services Code Point (DSCP) for Quality of Service
- IEEE 802.1Q VLAN tagging
- Loop Start and Ground Start supported

Common features of the VP604E series

- Compliant with SIP, H.323 and MGCP
- DHCP for simple IP address assignment
- Supports user-specific profiles
- Status LEDs
- QoS: IEEE 802.1Q, Diffserv support
- Management: SNMPv2, TFTP support

AT-VP624E FXS

10/100TX x 1 port (RJ45)
Analogue devices (FXS) x 24 ports
(RJ21 Telco)
Bypass PSTN x 1 port (RJ-11)

Features

- Compliant SIP, MGCP/INCS
- Supports up to four attached analogue devices i.e. phone, G3 fax, modem
- Supports standard vocoders G.711 (A-law, μ -law), G.723.1, G.729 a,b
- PSTN bypass in event of power failure
- Country-specific dial and busy tones
- QoS: IEEE 802.1Q, Diffserv support
- Management: SNMPv2, TFTP support

VP700 Series VoIP Gateway



AT-VP708-20

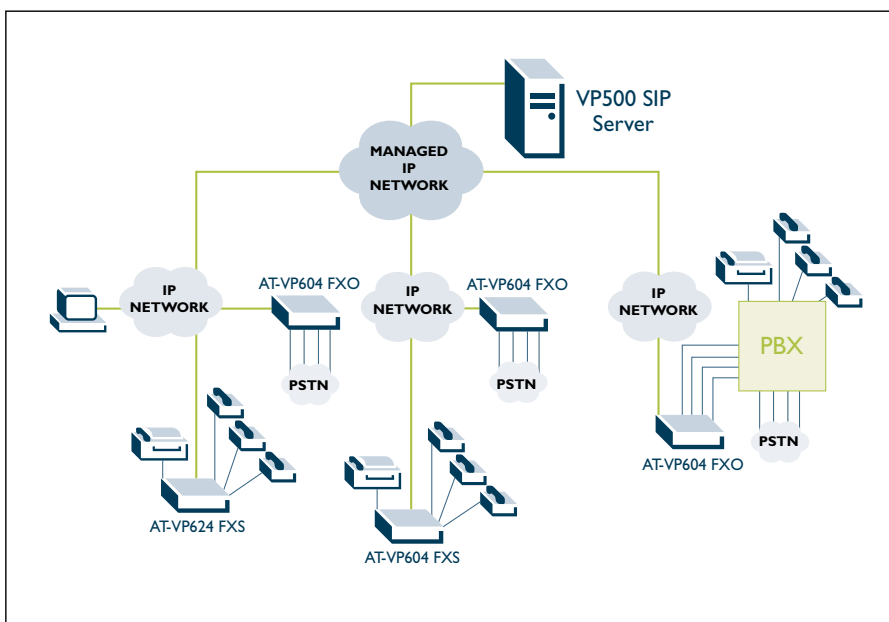
8-channel BRI VoIP Gateway
4 ISDN BRI/So (S/T) RJ45
Up to 8 simultaneous calls

AT-VP730-20

30-channel E1/PRI VoIP Gateway
4 ISDN PRI (S/T) RJ45
1 ISDN BRI/PRI (NT or TE)
Up to 60 simultaneous calls

Features

- Transparent ISDN/QSIG tunnelling
- User programmable call handling
- Deployable in SIP or H.323 VoIP networks
- CLI, SNMP, Telnet and TFTP for configuration and management
- RS232 console port for configuration
- Fax over IP support, including T.38
- Multiple codec support (G.711, G.723.1, G.726, G.729ab)
- Multiple LEDs for status indication at a glance
- Universal 100–240V AC power supply





8 Network Management & Software

Allied Telesyn's software offerings allow effective monitoring and proactive management of both small and large networks. GUI-based, point-and-click interfaces make report generation a snap. Reduce network downtime costs by identifying problems quickly.

NMS TELESYN 3.0 Network Management Software

For today's complex networks, Telesyn NMS allows users to manage all network components from one screen in a user-friendly format.

A product for everyone's needs.

The Telesyn NMS meets today's business requirements for the control and operation of Allied Telesyn's family of Internet routers and switches. Via a user-friendly interface, Telesyn NMS will substantially decrease the time required for deployments and provisioning of large networks, spanning into more efficient operations of existing networks with numerous benefits such as:

Rapid Deployment – via features such as template downloads (future) and flow-through provisioning (future), upgrading equipment or turning up new services becomes a snap with the Telesyn NMS.

Improved Network Management – using the extensive fault management and provisioning features of Telesyn NMS the operators can easily monitor and maintain the Allied Telesyn systems and interfaces.

Security Management – manages individual users and user groups and applies security policies to each: read-only, read-write and admin. Also creates security audit trails for tracking purposes.

Main features

- Network Discovery and Topology
- One Touch Installation (future)
- Security Management
- Fault Management
- Configuration Management
- Performance Monitoring
- Inventory Management
- Distributed Server Configuration
- Alarm Support
- Backup and Restore
- VLAN Provisioning and Monitoring
- File Export
- E-mail notification Service
- HP OpenView Integration
- Database Support – MySQL (Oracle future)
- Network Service Provisioning
- Northbound Management (future)

Supported Devices

- AT-RP24
- AT-RP24i
- AT-RP48
- AT-RP48i
- AT-RPG6
- AT-9812T
- AT-9816GB
- AT-SB4104
- AT-SB4108
- AT-8728
- AT-8748
- TELESYN 7000
- TELESYN 9000

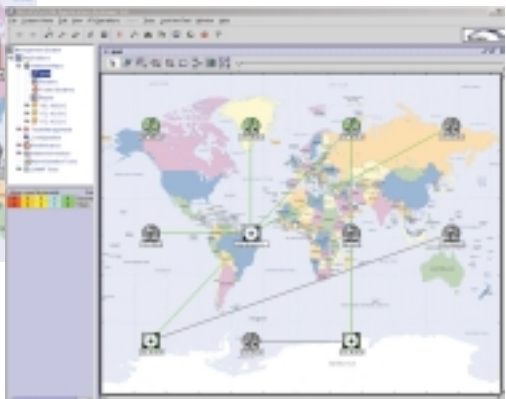
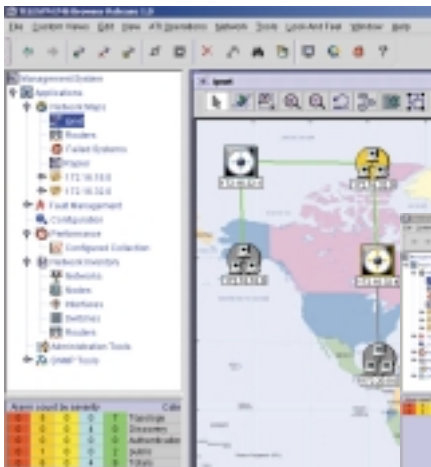
Ordering Information

- AT-TN-603-0G** Telesyn NMS Release 3.0 Gold
- AT-TN-603-0P** Telesyn NMS Release 3.0 Platinum

The Platinum software is intended for Service

Providers and includes

- Network-wide VLANs
- Port Management
- Card Management



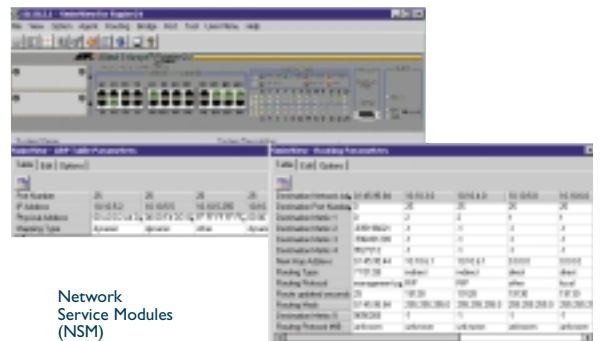
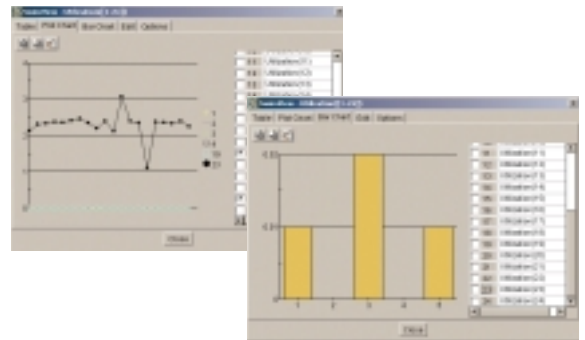
Network Management & Software

AT-View Plus 2.4 Network Device Management Software

AT-View Plus is the new, Java-based network device management solution from Allied Telesyn. Whether managing a large network distributed across multiple sites with HP OpenView or small networks with only a handful of nodes, AT-View Plus provides the tools needed to effectively monitor and proactively manage Allied Telesyn's intelligent networking products.

Features

- GUI interface
- Detailed agent viewer
- Real-time device/port status
- Configuration tools
- Drill-down functionality
- MIB Browser
- Supports four main RMON groups
- Reporting and graphical tools
- Supports NMS alarms
- Programming interfaces
- Java-based, multi-platform
- Works with HP OpenView
- Castle Rock SNMPc support



Supported Devices

These are updated frequently, so contact your Allied Telesyn sales representative or visit www.alliedtelesyn.com to get all the latest updates.

GBICS

AT-G8 Series

Gigabit expansion modules (uplink modules)

AT-A15SX
AT-A15LX
AT-A35LX/SC
AT-A35SX/SC
AT-A39T

Hubs

AT-FH812u
AT-FH824u

Layer 2 switches

AT-8012M
AT-8016F/MT
AT-8016F/SC
AT-8016F/ST
AT-8024
AT-8024GB
AT-8024M
AT-8026FC
AT-8026T
AT-8088/MT
AT-8088/SC
AT-8124
AT-8124XL (v2)
AT-8216FXL/SC
AT-8224XL
AT-8324
AT-8324SX
AT-8326GB
AT-8350GB
AT-8400
AT-8403
AT-8411
AT-8412/MT
AT-8412/SC
AT-8413/GB/T
AT-8414/SC
AT-8414/ST
AT-9006SX/SC
AT-9006T
AT-9410GB

Layer 2/4 switches

AT-8724XL
AT-8724XL (-48vDC)
AT-8748XL
AT-8748XL (-48vDC)

Layer 3 switches

AT-8824
AT-8848
Rapier 16F/MT
Rapier 16F/SC
Rapier 24
Rapier 24i
Rapier 48
Rapier 48i
Rapier G6
Rapier G6FLX/SC
Rapier G6FSX/MT-RJ
Rapier G6FSX/SC

Layer 3+ switches

AT-8948

Layer 3/4+ switches

AT-9812T
AT-9812T (-48vDC)
AT-9812TF
AT-9816GB
AT-9816GB (-48vDC)
AT-9816GF

Layer 4+ switches

AT-SB4104 (AC chassis)
AT-SB4104 (-48vDC)
AT-SB4108 (AC chassis)
AT-SB4108 (-48vDC)
AT-SB4151
AT-SB4152
AT-SB4215
AT-SB4311
AT-SB4352
AT-SB4411
AT-SB4441
AT-SB4451
AT-SB4452
AT-SB4461
AT-SB4462

Management modules

AT-B401
AT-BMGMT
AT-MCM02
AT-MMM-01
AT-PBM02
AT-SB4211

Media converters

AT-MCF06 family
AT-MCF12 family
AT-MCF106 family
AT-MCF112 family
AT-MPB3000
AT-MCM100-01SC
AT-MCM100-01ST
AT-MCM100-01SMR
AT-MCM100-01SMRF15
AT-MCM100-02SC
AT-MCM100-02ST
AT-MCM100-02SMR
AT-MCM100-02SMRF15
AT-MCM110-01SC
AT-MCM110-01ST
AT-MCM110-01SMR
AT-MCM110-01SMRF15
AT-MCM110-02SC
AT-MCM110-02ST
AT-MCM110-02SMR
AT-MCM110-02SMRF15
AT-MCM1000S-LX1
AT-MCM1000S-LXF15
AT-MCM1000T-LX1
AT-MCM1000T-LXF15
AT-MPB100TF/2
AT-MPB100TF/15
AT-MPB100TFS/15
AT-MPB1000SL/10
AT-MPB1000SL/10
AT-MPB1010TL/10
AT-MPB1010TSL/10
AT-PBC18
AT-PB13
AT-PB14
AT-PB15
AT-PB101
AT-PB102
AT-PB103/1
AT-PB103/2
AT-PB201
AT-PB202
AT-PB202/1
AT-PB202/3
AT-PB202/4
AT-PB301
AT-PB1001/1
AT-PB1001/3
AT-PB1005G

Network Service Modules (NSM)

AT-AR040
AT-AR041
AT-AR042

Optional Fast Ethernet Expansion Modules (uplink modules)

AT-A16
AT-A17
AT-A18
AT-A19
AT-A40/MT
AT-A40/SC
AT-A41/MT
AT-A41/SC
AT-A45/MT
AT-A45/SC
AT-B17

Optional Gigabit Ethernet Expansion Modules (uplink modules)

AT-A14
AT-A15SX
AT-A15LX
AT-A35LX/SC
AT-A35SX/SC
AT-A39T
AT-A42/GBIC
AT-A46
AT-A47
AT-B15/LX
AT-B15/SX

Port Interface Cards (PICs)

AT-AR020
AT-AR021S
AT-AR021U
AT-AR022
AT-AR023
AT-AR024
AT-AR026
AT-AR027

Power accessories

AT-BRPS8000
AT-FPS5033A
AT-FPS5033D
AT-PWVR10
AT-PWVR11
AT-PBPVWRAC
AT-PWVR8000
AT-RG005
AT-RPS740
AT-RPS8000
AT-RPS9000

Residential Gateways

AT-RG213FX
AT-RG213TX
AT-RG613SH
AT-RG613TX
AT-RG656BD

Routers

AT-AR240E
AT-AR250E
AT-AR255E
AT-AR300
AT-AR300L
AT-AR320
AT-AR350
AT-AR370S
AT-AR370U
AT-AR410
AT-AR450S
AT-AR720
AT-AR725
AT-AR725 (-48vDC)
AT-AR740
AT-AR740 (-48vDC)
AT-AR745
AT-AR745 (-48vDC)

Stacking modules

AT-BSTACK1
AT-STACK8
AT-STACKM

Network Management & Software

Castle Rock SNMPc 7.0 Network Management Software

Scalable, distributed management suite for managing small to large sized networks. Supports AT-View Plus.

SNMPc Enterprise

Up to 25,000 nodes

Windows XP/2000/NT Recommended

E-mail/pager event notification, advanced event actions, sophisticated trend reporting, full RMON-I application and more make SNMPc Enterprise edition a powerful tool for managing large, distributed networks.

SNMPc WorkGroup

Up to 1,000 nodes

Windows XP/2000/NT/ME/98

Leverage many of the same features as the Enterprise edition in this affordable version of SNMPc, designed for a single user managing a small to medium sized network.

Ordering Information

AT-VIEWPLUSV2-EU

Java Based Object Manager Network management system v2.0 - Full version Includes Silver Software Support Program 1 year

AT-VIEWPLUSUPG-SSI

Upgrade from ATVP 1.4 to ATVP 2.0.
Active software support required

AT-SNMPCWKGPV6

Castle Rock SNMPc Workgroup Edition, Ver: 6.0 - Windows support

AT-SNMPc-WKGRP UPG

Castle Rock SNMPc Workgroup Edition, Ver: 6.0
UPGRADE ONLY Purchase proof SNMPc required

AT-SNMPCENTV6WKGPUPGD

CastleRock SNMPc Workgroup to Enterprise upgrade

AT-SNMPCENTV6

Castle Rock SNMPc Enterprise Edition Ver: 6.0, including Remote Console and Remote Poller

AT-SNMPCENTV6RAX

Castle Rock SNMPc Remote Access Console (Java + unlimited logins)

AT-SNMPCENTEXTSW

CastleRock SNMPc Enterprise upgrade to EnterpriseV6

AT-VPSNMPCWKGP-SSI-EU

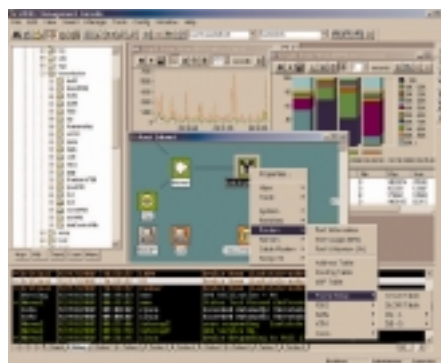
Bundle Package Object Network management system:

- AT-View Plus 2.0 + SNMPc Workgroup 6.0.
- Includes Silver Software Support Program 1 year for AT-VIEW PLUS product only

AT-VPSNMPCENT-SSI-EU

Bundle Package Object Network management system:

- AT-View Plus 2.0 + SNMPc Enterprise 6.0.
- Includes Silver Software Support Program 1 year for AT-VIEW PLUS product only



AT-Upgrade Manager Network Device Management Software

AT-Upgrade Manager is a new, Java-based application that allows for fast and efficient distribution of software upgrades and patches for Allied Telesyn devices. It automates the process of loading and activating software releases - both major and interim - and patches over multiple devices. It does this by allowing associated devices to be grouped together and after being supplied with the necessary license keys generated from WebGen, automatically applies the license keys to the grouped devices.

Features

- Audit trail
- Operation rollback
- Operation scheduling
- Serial number and model information retrieval
- Intuitive Graphical User Interface
- Software release upgrades over multiple devices
- Patch application over multiple devices
- Interim release upgrades over multiple devices
- Configuration file update over multiple devices
- GUI resource file update over multiple devices
- System help file update over multiple devices
- Enabling of features on multiple devices
- Serial number export ability
- Multiple-device reboot
- Support for Allied Telesyn devices

Supported Devices

AR300 series:	AT-AR300	AT-AR300L
	AT-AR320	AT-AR320S
	AT-AR330	AT-AR350
	AT-AR370(S)	AT-AR370(U)
	AT-AR390	AT-AR395
AR400 series:	AT-AR410	AT-AR450S
	AT-AR720	AT-AR725
AR700 series:	AT-AR740	AT-AR745
	AT-8724XL	AT-8748XL
8700XL series:	AT-9812T	AT-9816GB
9800 series:	AT-9812T	AT-9816GB
	Rapier 16f/MT	Rapier 16f/MT
	Rapier 16f/SC	Rapier 16f/SC
	Rapier 24	Rapier 24i
	Rapier 48	Rapier G6fSX/MT
	Rapier 48i	Rapier G6fSX/SC
Rapier™ series:	Rapier G6	Rapier G6fLX/SC
	AT-SB4108	AT-SB4104
SB4100 series:		

AT-SWUPGRDMGR-EU

AT-Upgrade Manager version 1.2 (Europe)

Network Management & Software

AT-AR01x & AT-AR06x

Hardware Enabled Encryption and Compression Cards

AT-AR01i

Encryption DES, 3DES & HMAC
+ Compression Card

AT-AR06i

Encryption DES, 3DES & HMAC
+ Compression high performance Card

Encryption features

- Dedicated processor based 56-bit key DES (Data Encryption Standard) Cipher Block Chaining Mode algorithm
- Unaffected by the U.S. State Department 'Key Recovery System' which requires key encryption details to be lodged with a third party organisation
- Encryption keys created by cryptographically secure hardware generator
- Key management and distribution:
 - Network key
 - 160 master key table
 - Session key

Authentication

- 128-bit key MD5

Compression features

- STACKER LZS adaptive loss-less data compression
- Compatible with Network IQ software compression
- Up to 8:1 data compression for high-speed file transfer
- FIPS PUB46
- ISO DEA-1
- ANSI X3.92

Accelerator Card compatibility:

	AT-AR01i-ECMAC	AT-AR06i-ECPAC
AT-AR3xx	•	
AT-AR410	•	
AT-AR720	•	
AT-AR725		•
AT-AR740	•	•
AT-AR745		•
Rapier 24/24i		•
Rapier 16f/16fi		•

All Allied Telesyn encryption products are subject to Export Approval restrictions and should not be re-exported without the approval of the appropriate national government authority. Allied Telesyn encryption products are available via accredited security partners.

Type of encryption and hashing mode supported by accelerator cards:

		AT-AR01i-ECMAC	AT-AR06i-ECPAC
Compression	LZS	Hw	Hw
Encryption	DES CBC	Hw	Hw
	3DES2Key	Hw	Hw
	3DESInner	Hw	Hw
	3DESOuter	Hw	Hw
HMAC Hashing	HMAC-DESMAC	Hw	Hw
	HMAC-MD5	Hw	Hw
	HMAC-SHA-1	Hw	Hw

Encrypted Channel supported by EMAC and PAC accelerator card:

	AT-AR01i	AT-AR06i
AT-AR3xx	511	
AT-AR4xx	1,024	
AT-AR7xx	1,024	1,024
Rapier 16/24i		2,048

AlliedWare™

Layer 3 Fully Featured Operating System

AlliedWare™ is Allied Telesyn's operating system, which supports the range of routing and switching products. AlliedWare™ consists of a core set of features with the added flexibility of having the ability to upgrade through purchasing upgrade bundles as outlined in this catalogue.

Features of Basic AlliedWare™

FEATURE	AR300	AR400	AR700	RAPIER	RAPIERi	9800	8948
Generic Attribution Registration Protocol (GARP)				●	●	●	●
General Packet Classifier				●	●	●	●
Quality of Service					●	●	●
Point-to-Point Protocol (PPP)	●	●	●	●	●	●	●
PPPoE	●	●	●	●	●	●	●
Frame Relay	●	●	●	●	●		
Integrated Services Digital Network (ISDN)	●	●	●	●	●		
X.25	●	●	●	●	●		
Synchronous Tunneling	●	●	●	●	●		
Internet Protocol (IP)	●	●	●	●	●	●	●
IP Multicasting	●	●	●	●	●	●	●
Novell IPX	●	●	●			●	●
DECnet	●	●	●				
Terminal Server	●	●	●	●	●		
Printer Server	●	●	●	●	●		
RIP	●	●	●	●	●	●	●
Open Shortest Path First (OSPF)	●	●	●	●	●	●	●
Bridging	●	●	●				
Test Facility	●	●	●	●	●	●	●
Network Time Protocol (NTP)	●	●	●	●	●	●	●
Asynchronous Call Control (ACC)	●	●	●	●	●		
Generic Routing Encapsulation	●	●	●	●	●	●	●
Trigger Facility	●	●	●	●	●	●	●
AppleTalk	●	●	●				
Time Division Multiplexing (TDM)	●	●	●	●	●		
Logging Facility	●	●	●	●	●	●	●
Scripting	●	●	●	●	●	●	●
Telephony Services	●						

FEATURE	AR300	AR400	AR700	RAPIER	RAPIERi	9800	8948
HTTP Server	●	●	●	●	●	●	●
HTTP Client	●	●	●	●	●	●	●
TFTP Client	●	●	●	●	●	●	●
TCP	●	●	●	●	●	●	●
Command Line Interface (CLI)	●	●	●	●	●	●	●
Graphical User Interface (GUI)		●	●	●	●	●	●
VLAN		●		●	●	●	●
STP				●	●	●	●
RSTP				●	●	●	●
Dynamic Host Configuration Protocol (DHCP)	●	●	●	●	●	●	●
Layer 2 Tunneling Protocol (L2TP)	●	●	●	●	●	●	●
Simple Network Management Protocol (SNMP)	●	●	●	●	●	●	●
Transaction Packet Assembler Disassembler (TPAD)	●	●	●	●	●		
Resource Reservation Protocol (RSVP)	●	●	●				
Encryption Service	●	●	●	●	●		
Compression Service	●	●	●	●	●	●	●
IP Security (IPSec)	●	●	●	●	●		
Virtual Router Redundancy Protocol (VRRP)	●	●	●	●	●		
Open Systems Interconnection (OSI)	●	●	●				
Secure Sockets Layer (SSL)		●	●	●	●	●	●
Internet Group Management Protocol (IGMP)	●	●	●	●	●	●	●
IGMP PROXY	●	●	●	●	●		
PIM-SM	●	●	●				
PIM-DM	●	●	●				
DVMRP	●	●	●				
ISAKMP	●	●	●	●	●	●	●
Compact Flash			●			●	●
Secure Shell (SSH)	●	●	●	●	●	●	●

Features option description

Novell IPX	Connectionless datagram protocol based as the transport mechanism.	IGMP	Protocol used between hosts and multicast routers and switches on a single physical network to establish hosts' membership in particular multicast groups. Multicast routers use this information, in conjunction with a multicast routing protocol, to support IP multicast forwarding across the Internet.
AppleTalk	From within the Macintosh desktop environment, AppleTalk provides internetworking for Macintosh computers and other peripheral devices using LocalTalk media.	IPv6	The next generation of the Internet protocol (IP). It has primarily been developed to solve the problem of the eventual exhaustion of the IPv4 address space, but also offers other enhancements: <ul style="list-style-type: none"> - Addresses are 16 bytes long in contrast to IPv4's 4 byte addresses. - Globally unique addresses with more levels of addressing hierarchy, to reduce the size of routing tables. - Auto-configuration of addresses by hosts. - Improved scalability of multicast routing, by adding a 'scope' field to multicast addresses. - A new type of address, the 'anycast address,' which is used to send a packet to any one of a group of devices.
RSVP	Signalling protocol designed to provide guaranteed QoS (Quality of Service) for network traffic. To allow hosts and applications that do not support RSVP to take advantage of RSVP services, AlliedWare™ implements a RSVP proxy agent.	BGP-4	External gateway protocol which allows two routers in different routing domains, known as Autonomous Systems (AS), to exchange routing information, thereby facilitating the forwarding of data across the border of the routing domains. BGP allows routers to learn multiple paths, choose the best path for routing information and install that path in the IP routing table.
DVMRP	Internet routing protocol that provides an efficient mechanism for connectionless datagram delivery to a group of hosts across an internetwork. It is a distributed protocol that dynamically generates IP Multicast delivery trees using a technique called Reverse Path Multicasting (RPM).	IS-IS	Intermediate-to-Intermediate System is an OSI routing protocol for dynamic routing between intermediate and end network devices.
PIM-DM	PIM Dense Mode is similar to DVMRP in that it employs the RPM algorithm. However, the differences between PIM-DM and DVMRP are: <p>PIM-DM relies on the presence of an existing unicast routing protocol to provide routing table information to build up information for the multicast forwarding database, but it is independent of the mechanisms of the specific unicast routing protocol. In contrast, DVMRP contains an integrated routing protocol that makes use of its own RIP-like exchanges to compute the required unicast information.</p> <p>Unlike DVMRP, PIM-DM simply forwards multicast traffic on all downstream interfaces until explicit prune (un-join) messages are received. PIM-DM accepts the overhead of broadcast-and-prune in the interests of simplicity and flexibility and of eliminating routing protocol dependencies.</p>	Firewall	Security device designed to allow safe access to the Internet by enforcing a set of access rules between various interfaces. A firewall typically has two interfaces, one that is attached to the public network (Internet) and one that is attached to an internal private network (intranet). The firewall prevents unrestricted access to the private network and protects the computer systems behind the firewall from attack.
PIM-SM	PIM Sparse Mode provides efficient communication between members of sparsely distributed groups – the type of groups that are most common in wide-area internetworks. PIM-SM is designed to limit multicast traffic so that only those network devices interested in receiving traffic for a particular group receive the traffic.		

AlliedWare™

Layer 3 Fully Featured Operating System

Features option availability

	BASIC L2/L3	FULL L3	ADVANCED L3	SECURITY
AR300 Series	Basic AlliedWare™ features ships with the product	N/A	N/A	Firewall SMTP Proxy HTTP Proxy
AR400 Series	Basic AlliedWare™ features ships with the product	N/A	IPv6 BGP4 Loadbalancing	Firewall SMTP Proxy HTTP Proxy
AR700 Series	Basic AlliedWare™ features ships with the product	N/A	IPv6 BGP4 Loadbalancing	Firewall SMTP Proxy HTTP Proxy
Rapier Series & 8800 Series	Basic AlliedWare™ features ships with the product	IPX Routing AppleTalk RSVP DVMRP PIM DM PIM SM	IPv6 BGP4 Loadbalancing	Firewall SMTP Proxy HTTP Proxy
9800 Series	Basic AlliedWare™ features ships with the product	AppleTalk RSVP VRRP DVMRP PIM DM PIM SM	IPv6 BGP4 OSI Loadbalancing	Firewall SMTP Proxy HTTP Proxy

Advanced features order option

AT-RPFL3UPGRD	Rapier™ Full Layer 3 Upgrade	AT-AR400sSecPk-00	AR400 series Security Pack Upgrade
AT-AR9800FL3UPGRD	9800 series Full Layer 3 Upgrade	AT-AR700sSecPk-00	AR700 series Security Pack Upgrade
AT-AR400-ADVL3UPGRD	AR400 series Advanced Layer 3 Upgrade	AT-RPsecPk-00	Rapier™ Layer 3 Switch Security Pack Upgrade
AT-AR700-ADVL3UPGRD	AR700 series Advanced Layer 3 Upgrade	AT-9800SecPk-00	9800 series Layer 3 Switch Security Pack Upgrade
AT-RPADVL3UPGRD	Rapier™ series Advanced Layer 3 Upgrade	* only the AR300 V2 can support this option, please check with your sales representative in advance	
AT-9800ADVL3UPGRD	9800 series Advanced Layer 3 Upgrade		
AT-AR300v2SecPk-00	AR300 series Security Pack Upgrade*		



9 Wireless Solutions

Allied Telesyn's Wireless products provide the customer with the highest performance and highest compliancy to standards today, for unmatched investment protection in the wireless marketplace. All of Allied Telesyn's wireless solutions have 'best of breed' performance, especially where security features and

authentication protocols are required for network robustness. Advanced software features and a broad range of accessories provide high-end functionality from SoHo to enterprise class networks.

Example:

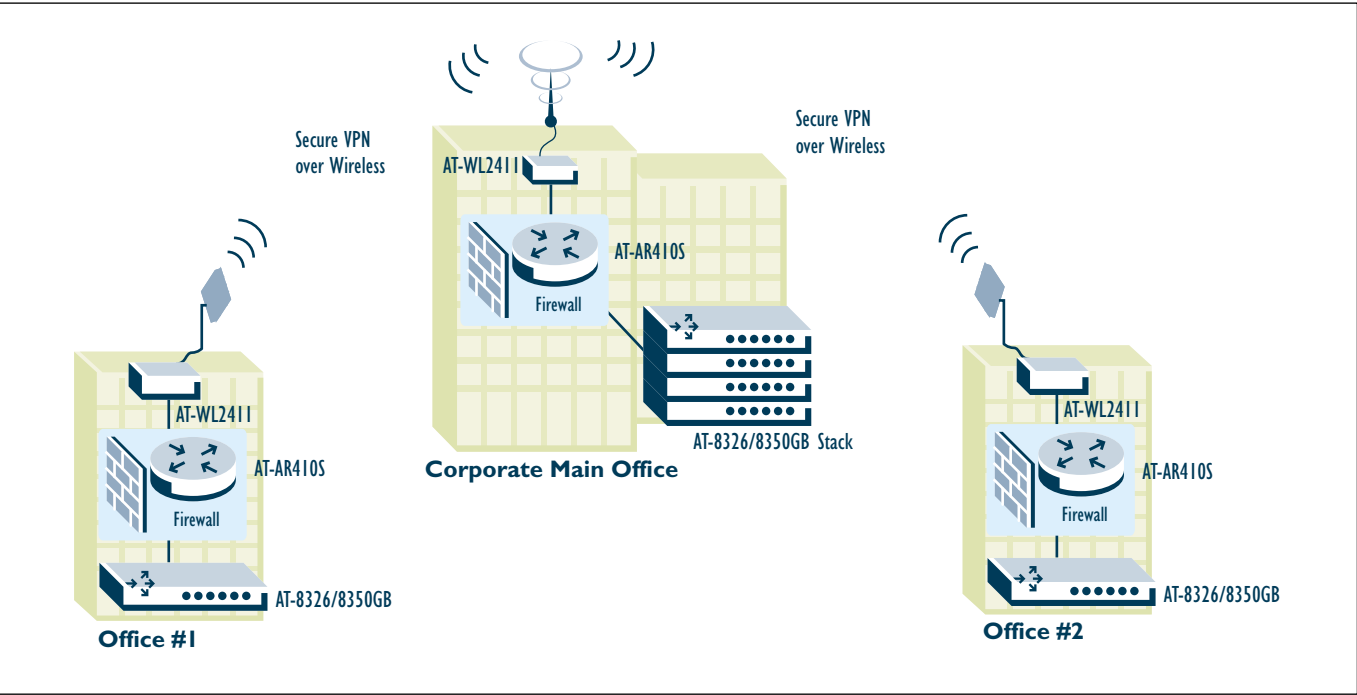
'Wire-free' Network Interconnections

A corporation has several large offices in the city centre within proximity of each other and needs to find the most cost-effective method of interconnecting them. Leased line services are expensive and dial-up services don't support bandwidth requirement. Further investigations confirmed that line-of-sight between offices is achievable and that access to roof-tops for

mounting antennae is available. Going wireless between these sites was the obvious choice as it offered high-bandwidth, only involved a one-off set-up cost with no recurring fees and didn't require any licensing.

AT-WL2411 WiFi access points with different antennae options are deployed in Point-to-Multipoint topology to provide the connections

over radio waves. Depending on specific environments, multiples of E1-like performance can be achieved on such links. To secure the connections from eavesdropping, IPSec 3DES encryption is implemented over the wireless connection by deploying AT-AR410 routers, configured with the VPN option, behind each Access Point.



Wireless Series Wireless LAN Solutions



AT-WA1004G

SOHO wireless access point
10/100TX x 4 ports

Features

- 128-bit WEP encryption
- IEEE 802.11b/g compliant
- WPA (Wireless Protected Area) support and upgradeable via firmware
- 'Open System' and 'Shared Key' WEP encryption supported

Two Year Warranty



AT-WA3404

SOHO wireless access point
10/100TX x 4 ports

Features

- 64-bit or 128-bit WEP encryption
- Supports up to 64 simultaneous users
- MAC address filtering
- SNMP management

Two Year Warranty



AT-WA7500

Enterprise wireless a,b,g access point (indoor)



AT-WA7501

Enterprise wireless a,b,g access point with IP54 enclosure (outdoor)
10/100TX x 1 port

Features

- Secure information transmission with 40-128 bit
- Wired Equivalent Privacy (WEP) data encryption
- In excess of 153 metres transmission distances
- IP Tunnelling
- Wireless bridging
- Telnet and SNMP web GUI management
- Long range antennas available
- Dual speed access point
- Dual radio slot
- IEEE 802.11a, 802.11b, 802.11g and 802.11i standard support
- IP54 enclosure (AT-WA7501 only)

Two Year Warranty



AT-WCC200G

Wireless card bus adapter

Features

- 64-bit, 128-bit and 256-bit WEP encryption
- Dynamic channel selection
- Automatic datarate switching
- Dynamic datarate scaling
- Compatible with IEEE 802.11g high-rate standard with speeds up to 54Mbps
- Backward compatible with IEEE 802.11b standard



AT-WCL007

PCI adapter wireless client

Features

- 64-bit or 128-bit WEP encryption
- IEEE 802.1x and RC4 authentication
- Additional external antenna (option)
- Supports all popular operating systems
- Auto-configures for use in multiple countries
- PC Card type

Two Year Warranty



AT-WCL452

Wireless radio

Features

- 64-bit or 128-bit WEP encryption
- Supports all popular operating systems
- Auto-configures for use in multiple countries
- PC Card (PCMCIA) type II design

Lifetime Warranty

Model	Dimensions	Weight
AT-WA1004G	14.1cm x 10cm x 27cm	.3kg
AT-WA3404	N/A	N/A
AT-WA7500	25cm x 15.9cm x 3.8cm	.625kg
AT-WCC200G	11.8cm x .7cm x 5.4cm	.625kg
AT-WCL007	1.3cm x .9cm	.03kg
AT-WCL452	12cm x 5.4cm x .8cm	.25kg

Wireless Series

Wireless LAN Solutions



AT-WCL460

USB adapter wireless client

Features

- 64-bit or 128-bit WEP encryption
- IEEE 802.1x and RC4 authentication
- Supports all popular operating systems
- Auto-configures for use in multiple countries
- USB adapter

Lifetime Warranty



AT-WCP200G

Wireless PCI adapter

Features

- 64-bit, 128-bit and 256-bit WEP encryption
- Dynamic channel selection
- Maximum reliability, throughput and connectivity with automatic datarate switching
- Dynamic datarate scaling
- Compatible with IEEE 802.11g high-rate standard with speeds up to 54Mbps
- Backward compatible with IEEE 802.11b standard
- Simple user setup and diagnostics utilities
- Available for both standards and low-profile applications

Two Year Warranty



AT-WL241I

Enterprise wireless access point

Features

- Secure information transmission with 40-128 bit Wired Equivalent Privacy (WEP) data encryption
- Standards based 802.11b connectivity
- In excess of 153 metres transmission distances
- Light weight and compact size
- IP Tunnelling
- Wireless bridging
- Telnet and SNMP web GUI management
- Long range antennas available

Two Year Warranty



AT-WM3400

Wireless-Ethernet media converter

Features

- Wireless access through a PC's RJ45 Ethernet connection
- 64-bit or 128-bit WEP encryption

Two Year Warranty

Refer to the 'Wire-free Network Interconnections' diagram on page 49 for an example of wireless networking.

Model	Dimensions	Weight
AT-WCL460	10.1cm x 3cm x 1.6cm	.027kg
AT-WCP200G	13.3cm x 21.6cm x 12.1cm	.05kg
AT-WL241I	15cm x 9.3cm x 3.5cm	.25kg
AT-WM3400	N/A	N/A

Wireless ETSI compliant Antennas

AT-INT71489

Diversity Antenna 2.4GHz with Radial connector; Azimuth plane 360° - Vertical plane 50°

AT-INT70141

Antenna 2.4GHz, 3dBi, Mini Flat, Azimuth plane 360° - Vertical plane 180°

AT-INT63363

Antenna 2.4GHz, 5dBi, Omni, Azimuth plane 360° - Vertical plane 30°

AT-INT065349

Antenna 2.4GHz, 9dBi, Omni, Azimuth plane 360° - Vertical plane 14°

Wireless FCC compliant Antennas

AT-INT71121

Diversity Antenna 2.4GHz, 3dBi, drop ceiling installation

AT-INT67262

Antenna 2.4GHz, 5dBi, Dual Flat, Azimuth plane 60° - Vertical plane 30°

AT-INT67263

Antenna 2.4GHz, 5dBi, Flat panel, Azimuth plane 60° - Vertical plane 80°

AT-INT71122

Antenna 2.4GHz, 9dBi, Corner Reflector, Azimuth plane 65° - Vertical plane 75°

AT-INT63366

Antenna 2.4GHz, 14dBi, Flat panel, Azimuth plane 30° - Vertical plane 30°

AT-INT063365

Antenna 2.4GHz, 15dBi, Yagi directive, Azimuth plane 34° - Vertical plane 30°

Wireless Antenna accessories

AT-INT069887

Cable assembly from access point to N receptacle

AT-INT70403

Cable assembly from access point to N plug

AT-INT064616

Coax cable assembly N to N connector; 75cm

AT-INT063245

Coax cable assembly N to N connector; 150cm

AT-INT063246

Coax cable assembly N to N connector; 600cm

AT-INT71179

Coax cable assembly N to N connector; 900cm

AT-INT69893

AP Power Supply holder kit

AT-INT069888

Bracket for Dual Mounting Antenna

AT-INT63198

Antenna cable splitter 2.4GHz

AT-INT586610

Lightning suppressor spare/replacement capsule

AT-INT61868

Lightning suppressor

Power over Ethernet system

AT-INT071620

1 port Mobile LAN Power bridge

AT-INT071578

6 port Mobile LAN Power bridge

AT-INT071579

12 port Mobile LAN Power bridge

AT-INT071581

Power over Ethernet splitter

IO Media Conversion

Allied Telesyn media converters make it possible to mix media and speed on a network to optimise price/performance, whether you are extending legacy networks or connecting

inexpensive low bandwidth desktops to a state-of-the-art fibre backbone.

Example:

Mission-critical Network in a Military Base

Fibre technology is the ubiquitous backbone cabling system in military environments primarily for high security and increased bandwidth support at long ranges. Gigabit Ethernet is chosen for this backbone to support the large number of network users. Because network availability is of prime concern due to the nature of the environment, a fully meshed architecture is deployed.

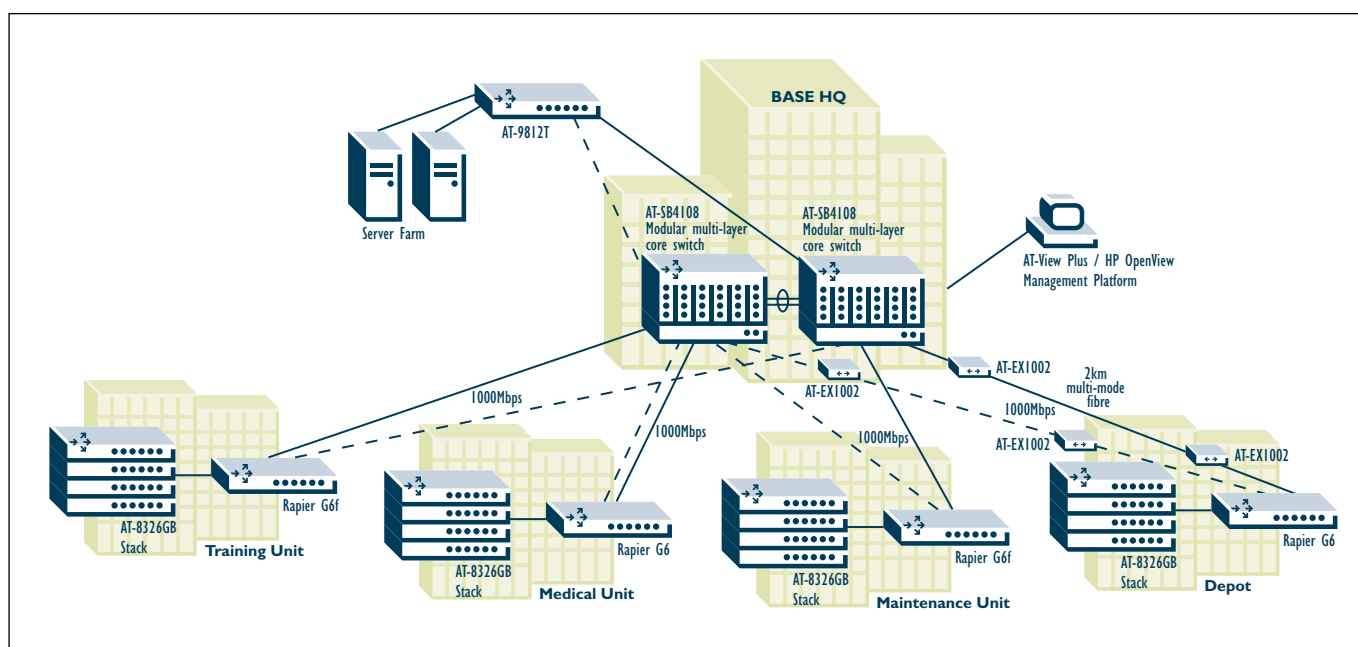
In the core, two dual-homed AT-SB4108 switches provide full redundancy as well as overall load

distribution. The AT-SB4108 core switch is a modular chassis-based Layer 3/4 Gigabit Ethernet switch supporting redundant switching fabric and power supplies, hot-swappable I/O cards as well as VRRP for Layer 3 redundancy.

From each building, two fully resilient connections to the core switches are provided by a Rapier™ Gigabit Ethernet Layer 3 switch. These switches provide switch aggregation functionality as they bring together desktop switches and feed their traffic into the core using Gigabit Ethernet over fibre. At the desktop layer, AT-8326GB Stackable

Fast Ethernet switches are deployed to provide switched 10/100 Ethernet or Fast Ethernet connectivity to computers and network peripherals.

In addition, to support Gigabit Ethernet over the entire fibre optic backbone, Allied Telesyn's Gigabit Ethernet network extenders AT-EX1002 were installed. These devices revolutionise Gigabit Ethernet deployment beyond allowed boundaries as they overcome multi-mode fibre distance limitations.



Media Converter Selector

Standalone/Rackmountable & Wall-mounted Media Converters

Gigabit Ethernet standalone/rackmountable media converters				
1000Mbps fibre multi-mode extender >>>	AT-EX1002SC/GM1	1000SX/SC x 1 port multi-mode Ext. SC x 1 port	2km	57
1000Mbps fibre multi-mode to single-mode >>>	AT-MC1001	1000SX (SC multi-mode) to 1000LX (SC single-mode)	10km	57
	AT-MC1001SC/GS2	1000SX (SC multi-mode) to 1000LX (SC single-mode)	20km	57
	AT-MC1001SC/GS3	1000SX (SC multi-mode) to 1000LX (SC single-mode)	50km	57
	AT-MC1001SC/GS4	1000SX (SC multi-mode) to 1000LX (SC single-mode)	70km	57
1000Mbps copper to fibre multi-mode >>>	AT-MC1004	1000T to 1000SX (SC multi-mode)	220-550m	57
1000Mbps copper to fibre single-mode >>>	AT-MC1005/1	1000T to 1000LX (SC single-mode)	10km	57
	AT-MC1005/2	1000T to 1000LX (SC single-mode)	20km	57
	AT-MC1005/3	1000T to 1000LX (SC single-mode)	50km	57
	AT-MC1005/4	1000T to 1000LX (SC single-mode)	70km	57
Fast Ethernet standalone/rackmountable media converters				
100Mbps fibre multi-mode to single-mode >>>	AT-MC104XL	100FX (SC multi-mode) to 100FX (SC single-mode)	15km	57
	AT-MC104LH	100FX (SC multi-mode) to 100FX (SC single-mode longhaul)	40km	57
	AT-MC104SC/FS3	100FX (SC multi-mode) to 100FX (SC single-mode longhaul)	75km	57
	AT-MC104SC/FS4	100FX (SC multi-mode) to 100FX (SC single-mode longhaul)	100km	57
100Mbps copper to fibre multi-mode >>>	AT-MC115XL	10/100TX to 10FL/100SX (ST multi-mode 850nm)	300m	57
	AT-MC116XL	10/100TX to 10FL/100SX (SC multi-mode 850nm)	300m	57
	AT-MC101XL	100TX to 100FX (ST multi-mode)	2km	57
	AT-MC102XL	100TX to 100FX (SC multi-mode)	2km	57
100Mbps copper to fibre single-mode >>>	AT-MC103XL	100TX to 100FX (SC single-mode)	15km	57
	AT-MC103LH	100TX to 100FX (SC single-mode longhaul)	40km	57
	AT-MC103SC/FS3	100TX to 100FX (SC single-mode longhaul)	75km	57
	AT-MC103SC/FS4	100TX to 100FX (SC single-mode longhaul)	100km	57
Ethernet standalone/rackmountable media converters				
10Mbps copper to fibre multi-mode >>>	AT-MC13	10T to 10FL (ST multi-mode)	2km	57
	AT-MC14	10T to 10FL (SC multi-mode)	2km	57
10Mbps copper to copper >>>	AT-MC15	10T to BNC	185m	57

Continued Overleaf

Media Converters

Standalone/Rackmountable & Wall-mounted Media Converters

Fast Ethernet speed/media converting switches				
100Mbps copper to fibre multi-mode >>>	AT-FS201	10/100TX to 100FX (ST multi-mode)	2km	58
	AT-FS202	10/100TX to 100FX (SC multi-mode)	2km	58
100Mbps copper to fibre single-mode >>>	AT-FS202SC/FS1	10/100TX to 100FX (SC single-mode)	15km	58
	AT-FS202SC/FS2	10/100TX to 100FX (SC single-mode)	40km	58
	AT-FS202SC/FS3	10/100TX to 100FX (SC single-mode)	75km	58
	AT-FS202SC/FS4	10/100TX to 100FX (SC single-mode)	100km	58
100Mbps copper to copper >>>	AT-FS203	10/100TX to 10/100TX	—	58
100Mbps copper to fibre >>>	AT-FS232/FS1	10/100TX to 100FX (SC)	15km	58
	AT-FS232/FS2	10/100TX to 100FX (SC)	40km	58
	AT-FS232/FS3	10/100TX to 100FX (SC)	75km	58
	AT-FS232/FS4	10/100TX to 100FX (SC)	100km	58
100Mbps copper to single fibre >>>	AT-FS237S13/1	10/100TX to 100FX (single-mode)	15km	58
	AT-FS238A	10/100TX to 100FX (single-mode)	15km	58
	AT-FS238B	10/100TX to 100FX (single-mode)	40km	58
NOTE - All media converters listed above (excluding AT-EX1002SC/GM1) can be used in the AT-MCR12, 12 slot rackmount chassis.				56
Fast Ethernet wall-mounted speed/media converting switches				
100Mbps copper to fibre multi-mode >>>	AT-FS211	10/100TX to 100FX (ST multi-mode)	2km	58
	AT-FS212	10/100TX to 100FX (SC multi-mode)	2km	58
100Mbps copper to fibre single-mode >>>	AT-FS212/1	10/100TX to 100FX (SC single-mode)	15km	58
	AT-FS212/2	10/100TX to 100FX (SC single-mode longhaul)	40km	58
	AT-FS212/3	10/100TX to 100FX (SC single-mode longhaul)	70km	58
	AT-FS212/4	10/100TX to 100FX (SC single-mode longhaul)	90km	58
10/100Mbps copper to 100Mbps fibre multi-mode >>>	AT-FS214	10/100TX to 100FX (MT-RJ multi-mode)	2km	58
	AT-FS215	10/100TX to 100FX (VF-45 multi-mode)	2km	58
	AT-FS216	10/100TX to 100FX (LC multi-mode)	2km	58

Network Extender

Single port VDSL network extenders			
10/100Mbps copper to VDSL >>>	AT-MC601	10/100TX to VDSL subscriber	59
	AT-MC602	10/100TX to VDSL provider	59
	AT-MC603/4	10/100TX Ethernet-over-VDSL	59

Media Converters

Multi-channel Media Converters

Fast Ethernet multi-channel media converters				
6 port 100Mbps copper to fibre multi-mode >>>	AT-MCF106/ST	100TX x 6 ports to 100FX x 6 ports (ST multi-mode)	2km	59
	AT-MCF106/SC	100TX x 6 ports to 100FX x 6 ports (SC multi-mode)	2km	59
	AT-MCF106/VF	100TX x 6 ports to 100FX x 6 ports (VF-45 multi-mode)	2km	59
6 port 100Mbps copper to fibre single-mode >>>	AT-MCF106/SM	100TX x 6 ports to 100FX x 6 ports (SC single-mode)	15km	59
	AT-MCF106/LH	100TX x 6 ports to 100FX x 6 ports (SC single-mode longhaul)	40km	59
12 port 100Mbps copper to fibre multi-mode >>>	AT-MCF112/ST	100TX x 12 ports to 100FX x 12 ports (ST multi-mode)	2km	59
	AT-MCF112/SC	100TX x 12 ports to 100FX x 12 ports (SC multi-mode)	2km	59
	AT-MCF112/VF	100TX x 12 ports to 100FX x 12 ports (VF-45 multi-mode)	2km	59
12 port 100Mbps copper to fibre single-mode >>>	AT-MCF112/SM	100TX x 12 ports to 100FX x 12 ports (SC single-mode)	15km	59
	AT-MCF112/LH	100TX x 12 ports to 100FX x 12 ports (SC single-mode longhaul)	40km	59
Ethernet multi-channel media converters				
6 port 10Mbps copper to fibre multi-mode >>>	AT-MCF06/ST	10T x 6 ports to 10FL x 6 ports (ST multi-mode)	2km	59
	AT-MCF06/SC	10T x 6 ports to 10FL x 6 ports (SC multi-mode)	2km	59
12 port 10Mbps copper to fibre multi-mode >>>	AT-MCF12/ST	10T x 12 ports to 10FL x 12 ports (ST multi-mode)	2km	59
	AT-MCF12/SC	10T x 12 ports to 10FL x 12 ports (SC multi-mode)	2km	59

PowerBlade

Gigabit Ethernet media conversion blades				
1000Mbps fibre multi-mode to single-mode >>>	AT-PB1001/1	1000SX (SC multi-mode) to 1000LX (SC single-mode)	10km	56
	AT-PB1001/2	1000SX (SC multi-mode) to 1000LX (SC single-mode)	20km	56
	AT-PB1001/3	1000SX (SC multi-mode) to 1000LX (SC single-mode)	50km	56
	AT-PB1001/4	1000SX (SC multi-mode) to 1000LX (SC single-mode)	70km	56
1000Mbps copper to fibre GBIC >>>	AT-PB1005G	1000T to 1000SX/LX GBIC	220m - 70km	56
Fast Ethernet media conversion blades				
100Mbps copper to fibre multi-mode >>>	AT-PB101	100TX to 100FX (ST multi-mode)	2km	56
	AT-PB102	100TX to 100FX (SC multi-mode)	2km	56
	AT-PB301	100TX to 100FX (VF-45 multi-mode)	2km	56
	AT-PB302	100TX to 100FX (MT-RJ multi-mode)	2km	56
100Mbps copper to fibre single-mode >>>	AT-PB103/1	100TX to 100FX (SC single-mode)	15km	56
	AT-PB103/2	100TX to 100FX (SC single-mode longhaul)	40km	56
	AT-PB103/3	100TX to 100FX (SC single-mode longhaul)	75km	56
	AT-PB103/4	100TX to 100FX (SC single-mode longhaul)	100km	56
Ethernet media conversion blades				
10Mbps copper to fibre multi-mode >>>	AT-PB13	10T to 10FL (ST multi-mode)	2km	56
	AT-PB14	10T to 10FL (SC multi-mode)	2km	56
10Mbps copper to copper >>>	AT-PB15	10T to BNC	185m	56
Fast Ethernet speed/media conversion switching blades				
10/100Mbps copper to 100Mbps fibre multi-mode >>>	AT-PB201	10/100TX to 100FX (ST multi-mode)	2km	56
	AT-PB202	10/100TX to 100FX (SC multi-mode)	2km	56
	AT-PB204	10/100TX to 100FX (MT-RJ multi-mode)	2km	56
	AT-PB205	10/100TX to 100FX (VJ-45 multi-mode)	2km	56
10/100Mbps copper to 100Mbps fibre single-mode >>>	AT-PB202/1	10/100TX to 100FX (SC single-mode)	15km	56
	AT-PB202/2	10/100TX to 100FX (SC single-mode)	40km	56
	AT-PB202/3	10/100TX to 100FX (SC single-mode)	70km	56
	AT-PB202/4	10/100TX to 100FX (SC single-mode)	90km	56

NOTE - The media conversion blades listed above are designed to be used with/in the AT-PBC18, manageable rackmount chassis.

Media Converters

10Mbps, 10/100Mbps, 100Mbps & 1000Mbps



PowerBlade Manageable Media Conversion System



AT-PBC18

18 slot rackmount chassis

Features

- Designed to NEBS Compliance
- Optional Telnet and SNMP management

Two Year Warranty



Gigabit Ethernet Media Conversion Blade

AT-PB1001/1 1000SX (SC multi-mode) to 1000LX (SC single-mode), 10km
AT-PB1001/2 1000SX (SC multi-mode) to 1000LX (SC single-mode), 20km
AT-PB1001/3 1000SX (SC multi-mode) to 1000LX (SC single-mode), 50km
AT-PB1001/4 1000SX (SC multi-mode) to 1000LX (SC single-mode), 70km
AT-PB1005G 1000T to 1000SX/LX GBIC 220m - 70km

Fast Ethernet Media Conversion Blades

AT-PB101 100TX to 100FX (ST multi-mode), 2km
AT-PB102 100TX to 100FX (SC multi-mode), 2km
AT-PB103/1 100TX to 100FX (SC single-mode), 15km
AT-PB103/2 100TX to 100FX (SC single-mode longhaul), 40km

AT-PB103/3 100TX to 100FX (SC single-mode longhaul), 75km
AT-PB103/4 100TX to 100FX (SC single-mode longhaul), 100km
AT-PB301 100TX to 100FX (VF-45 multi-mode), 2km
AT-PB302 100TX to 100FX (MT-RJ multi-mode), 2km

Fast Ethernet Speed/Media Conversion Switching Blades

AT-PB201 10/100TX to 100FX (ST multi-mode), 2km
AT-PB202 10/100TX to 100FX (SC multi-mode), 2km
AT-PB202/1 10/100TX to 100FX (SC single-mode), 15km
AT-PB202/2 10/100TX to 100FX (SC single-mode), 40km
AT-PB202/3 10/100TX to 100FX (SC single-mode), 70km
AT-PB202/4 10/100TX to 100FX (SC single-mode), 90km
AT-PB204 10/100TX to 100FX (MT-RJ multi-mode), 2km
AT-PB205 10/100TX to 100FX (VJ-45 multi-mode), 2km

Ethernet Media Conversion Blades

AT-PB13 10T to 10FL (ST multi-mode), 2km
AT-PB14 10T to 10FL (SC multi-mode), 2km
AT-PB15 10T to BNC, 185m

Lifetime Warranty



Allied Telesyn standards-based

Gigabit Interface Converters (GBIC) modules

AT-G8T	1000T x 1 port	100m
AT-G8SX	1000SX x 1 port	550m
AT-G8LX10	1000LX x 1 port	10km
AT-G8LX25	1000LX x 1 port	25km
AT-G8LX40	1000LX x 1 port	40km
AT-G8LX70	1000LX x 1 port	70km

Telnet and SNMP management module and redundant power module for PowerBlade™

AT-PBM02 RS232 x 1 port, 10T x 1 port
AT-PBPWRAC Redundant AC power supply option
AT-PBPWRDC -48vDC power supply option

AT-MCR12 12 Slot Media Conversion Rackmount Chassis



AT-MCR12

12 slot rackmount chassis

Features

- Holds up to 12 Allied Telesyn media or 10/100Mbps converters
- 10Mbps, 100Mbps and 1000Mbps media converters, as well as two-port switches, can be mounted in any combination
- Optional redundant hot-swappable power supply
- Fits into a standard 19-inch network rack

Lifetime Warranty

Redundant power module for the AT-MCR12

AT-PWR4 Redundant power supply option
AT-PWR9 -48vDC power supply option

Model	Dimensions	Weight
AT-MCR12	44cm x 22cm x 13cm	9.5kg
AT-PBC18 chassis	44cm x 47cm x 11cm	9.1kg
Blades	20cm x 10cm x 2.3cm	.14kg

Media Converters

1000Mbps, 100Mbps, 10/100Mbps & 10Mbps

AT-EX1000 Gigabit Ethernet Media Converters

AT-EX1002SC/GM1

1000SX/SC x 1 port
multi-mode Extend (SC) x 1 port 2km



Features

- Compact, standalone chassis
- Extends Gigabit Ethernet to 2km on multi-mode fibre
- Significant cost saving using multi-mode vs single-mode fibre cabling
- Gigabit deployment over legacy FDDI multi-mode fibre cabling
- Must be connected in pairs (one device on each end of the extended multi-mode fibre)

Lifetime Warranty

Common features of the MC1000 series

- Support for multi-mode and single-mode fibre full-duplex
- Fits the AT-MCR12 rackmount chassis

Lifetime Warranty

Common features of the MC100 series

- Half and full-duplex operation
- Transparent to IEEE 802.1Q packets
- Fits the AT-MCR12 rackmount chassis
- Auto-negotiation (AT-MC115XL and AT-MC116XL only)

Lifetime Warranty

MC100 Series Fast Ethernet Media Converters



AT-MC101XL 100TX to 100FX
(ST multi-mode), 2km

AT-MC102XL 100TX to 100FX
(SC multi-mode), 2km

AT-MC103XL 100TX to 100FX
(SC single-mode), 15km

AT-MC103LH 100TX to 100FX
(SC single-mode longhaul), 40km

AT-MC103SC/FS3 100TX to 100FX
(SC single-mode longhaul), 75km

AT-MC103SC/FS4 100TX to 100FX
(SC single-mode longhaul), 100km

AT-MC104XL 100FX (SC multi-mode) to 100FX
(SC single-mode), 15km

AT-MC104LH 100FX (SC multi-mode) to 100FX
(SC single-mode longhaul), 40km

AT-MC104SC/FS3 100FX (SC multi-mode) to
100FX (SC single-mode longhaul), 75km

AT-MC104SC/FS4 100FX (SC multi-mode) to
100FX (SC single-mode longhaul), 100km

AT-MC115XL 10/100TX to 10FL/100SX
(ST multi-mode 850nm), 300m

AT-MC116XL 10/100TX to 10FL/100SX (SC
multi-mode 850nm), 300m

MC1000 Series Gigabit Ethernet Media Converters



AT-MC1001 1000SX

(SC multi-mode) to 1000LX (SC single-mode), 10km

AT-MC1001SC/GS2 1000SX (SC multi-mode) to
1000LX (SC single-mode), 20km

AT-MC1001SC/GS3 1000SX (SC multi-mode) to
1000LX (SC single-mode), 50km

AT-MC1001SC/GS4 1000SX (SC multi-mode) to
1000LX (SC single-mode), 70km

AT-MC1004 1000T to 1000SX
(SC multi-mode), 220-550m

AT-MC1005/1 1000T to 1000LX
(SC single-mode), 10km

AT-MC1005/2 1000T to 1000LX
(SC single-mode), 20km

AT-MC1005/3 1000T to 1000LX
(SC single-mode), 50km

AT-MC1005/4 1000T to 1000LX
(SC single-mode), 70km

MC10 Series Ethernet Media Converters



AT-MC13 10T to 10FL (ST multi-mode), 2km

AT-MC14 10T to 10FL (SC multi-mode), 2km

AT-MC15 10T to BNC, 185m

Common features of the MC10 series

- Half and full-duplex operation
- Transparent to IEEE 802.1Q packets
- Fits the AT-MCR12 rackmount chassis

Lifetime Warranty

Model	Dimensions	Weight
EX1000 series	20cm x 16cm x 3.8cm	1.3kg
MC100 series	10cm x 9.5cm x 2.5cm	.3kg
MC10 series	10cm x 9.5cm x 2.5cm	.3kg
MC1000 series	10cm x 9.5cm x 2.5cm	.3kg

Media Converters

100Mbps & 10/100Mbps

FS200 & FS230 Series Fast Ethernet Speed/Media Converting Switches



AT-FS201 10/100TX to 100FX
(ST multi-mode), 2km

AT-FS202 10/100TX to 100FX
(SC multi-mode), 2km

AT-FS202SC/FS1 10/100TX to 100FX
(SC single-mode), 15km

AT-FS202SC/FS2 10/100TX to 100FX
(SC single-mode), 40km

AT-FS202SC/FS3 10/100TX to 100FX
(SC single-mode), 75km

AT-FS202SC/FS4 10/100TX to 100FX
(SC single-mode), 100km

AT-FS203 10/100TX to 10/100TX

AT-FS232/FS1 10/100TX to 100FX (SC), 15km

AT-FS232/FS2 10/100TX to 100FX (SC), 40km

AT-FS232/FS3 10/100TX to 100FX (SC), 75km

AT-FS232/FS4 10/100TX to 100FX (SC), 100km

AT-FS237/FS1 10/100TX to 100FX
(single-mode), 15km
1310 nm TX/RX

AT-FS238A 10/100TX to 100FX
(single-mode), 15km

AT-FS238B 10/100TX to 100FX
(single-mode), 40km
1310 nm TX
1550 nm RX

Common features of the FS200 & FS230 series

- Convert speed as well as media type
- Compact physical size
- Auto MDI/MDI-X crossover (AT-FS201 and AT-FS202 only)
- Supports full and half-duplex operation
- 2,000 MAC address tables
- Store-and-Forward switching mode
- Transparent to IEEE 802.1Q packets
- Standalone or rackmountable
- Fits the AT-MCR12 rackmount chassis
- MissingLink and Smart MissingLink (AT-FS232 only)

Lifetime Warranty

FS210 Series Wall-mounted Fast Ethernet Speed/Media Converting Switches



AT-FS211

10/100TX to 100FX (ST multi-mode), 2km

AT-FS212

10/100TX to 100FX (SC multi-mode), 2km

AT-FS212/1

10/100TX to 100FX (SC single-mode), 15km

AT-FS212/2

10/100TX to 100FX
(SC single-mode longhaul), 40km

AT-FS212/3

10/100TX to 100FX
(SC single-mode longhaul), 70km

AT-FS212/4

10/100TX to 100FX
(SC single-mode longhaul), 90km

AT-FS214

10/100TX to 100FX (MT-RJ multi-mode), 2km

AT-FS215

10/100TX to 100FX (VF-45 multi-mode), 2km

AT-FS216

10/100TX to 100FX (LC multi-mode), 2km

Common features of the FS210 series

- Convert speed as well as media type
- Compact physical size
- Auto MDI/MDI-X crossover
- Supports full and half-duplex operation
- 4,000 MAC address tables
- Transparent to IEEE 802.1Q packets
- Support for multi-mode and single-mode fibre

Lifetime Warranty

Model	Dimensions	Weight
FS200 series	10cm × 9.5cm × 2.5cm	.3kg
FS210 series	9cm × 7cm × 2.2cm	.3kg
FS230 series	10.5cm × 9.5cm × 2.5cm	.3kg

Media Converters

100Mbps & 10Mbps

MCF100 Series Multi-channel Fast Ethernet Media Converters



AT-MCF106/ST

100TX x 6 ports to 100FX x 6 ports
(ST multi-mode), 2km

AT-MCF106/SC

100TX x 6 ports to 100FX x 6 ports
(SC multi-mode), 2km

AT-MCF106/VF

100TX x 6 ports to 100FX x 6 ports
(VF-45 multi-mode), 2km

AT-MCF106/SM

100TX x 6 ports to 100FX x 6 ports
(SC single-mode), 15km

AT-MCF106/LH

100TX x 6 ports to 100FX x 6 ports
(SC single-mode longhaul), 40km

AT-MCF112/ST

100TX x 12 ports to 100FX x 12 ports
(ST multi-mode), 2km

AT-MCF112/SC

100TX x 12 ports to 100FX x 12 ports
(SC multi-mode), 2km

AT-MCF112/VF

100TX x 12 ports to 100FX x 12 ports
(VF-45 multi-mode), 2km

AT-MCF112/SM

100TX x 12 ports to 100FX x 12 ports
(SC single-mode), 15km

AT-MCF112/LH

100TX x 12 ports to 100FX x 12 ports
(SC single-mode longhaul), 40km

Common features of the MCF100 series

- Fibre test switch
- Plug & play installation
- MissingLink integrity monitoring
- Optional Telnet and SNMP management

Lifetime Warranty

MCF Series Multi-channel Ethernet Media Converters



AT-MCF06/ST

10T x 6 ports to 10FL x 6 ports
(ST multi-mode), 2km

AT-MCF06/SC

10T x 6 ports to 10FL x 6 ports
(SC multi-mode), 2km

AT-MCF12/ST

10T x 12 ports to 10FL x 12 ports
(ST multi-mode), 2km

AT-MCF12/SC

10T x 12 ports to 10FL x 12 ports
(SC multi-mode), 2km

Common features of the MCF10 series

- Fibre test switch
- Plug & play installation
- MissingLink integrity monitoring
- Optional Telnet and SNMP management

Lifetime Warranty

Telnet and SNMP management module and redundant power module for the MCF100 & MCF10 series

AT-MCM02 RS232 x 1 port, 10T x 1 port

AT-PWR5 Redundant power supply option

AT-PWR7 -48VDC power supply option

MC600 Series Single Port VDSL Network Extenders

AT-MC601 VDSL subscriber

AT-MC602 VDSL provider

AT-MC60 Ethernet-over-VDSL

Common features of the MC600 series

- Supports selectable datarates up to 11Mbps full-duplex symmetrical operation
- Supports distances up to 1.4Km over a single pair of copper
- Up to 25Mbps downstream asymmetrical operation
- Operates over Cat 1, 2, 3 or 5 quality cabling
- Integral POTS splitter
- GUI configuration tool
- Standalone, rackmountable (fits AT-MCR12), wall-mountable
- Software upgrade

Interfaces

- VDSL interface RJ-11 x 1 port
- 10/100TX x 1 port RJ45
- POTS management x 1 port RJ-11

Two Year Warranty

Model	Dimensions	Weight
MC600 series	10cm x 9.5cm x 2.5cm	.3kg
MCF series	44cm x 24cm x 4.4cm	3.5kg
MCF100 series	44cm x 24cm x 4.4cm	3.5kg



II LAN Adapter Cards

Network Adapters

Allied Telesyn offers a complete range of Ethernet, Fast Ethernet and Gigabit Ethernet adapter cards to support the leading network technologies, architectures, and operating systems. As well as continuing to drive down the cost of

desktop copper adapters, Allied Telesyn has firmly established itself as the market leader worldwide for Ethernet and Fast Ethernet fibre adapters.

2900 Series Gigabit Ethernet PCI Adapters



AT-2971SX/SC

1000SX x 1 port (SC)

AT-2971T

1000T x 1 port (RJ45)

Common features of the 2971 series

- Traffic and troubleshooting LEDs
- Support for all popular operating systems
- 32/64-bit bus
- 33/66MHz operation
- Fully IEEE 802.3z compliant
- PXE 2.0 support

Lifetime Warranty



AT-2930SX V2

1000SX x 1 port (SC)

AT-2930TV2

1000T x 1 port (RJ45)

Common features of the 2930 series

- PXE support
- VLAN support
- Advanced diagnostics
- Advanced installation utility
- PCI 2.2 compatible
- Traffic and troubleshooting LEDs
- Support for all popular operating systems
- 32/64-bit bus
- 33/66MHz operation
- Fully IEEE 802.3z compliant
- 10/100/1000T auto-negotiation (AT-2930T only)

Lifetime Warranty



10/100/1000Mbps & 1000Mbps

AT-2916T

10/100/1000T x 1 port (RJ45)

Features

- Supports up to 9KB Jumbo frames
- TCP, UDP and IP checksum generation and check
- Support for all popular operating systems including Sun Solaris
- Cable monitoring and auto-correct
- Virtual Cable Tester (VCT)
- Advanced Power Management (ACPI)
- Parity monitoring on all data paths

AT-2915T

1000T x 1 port (RJ45)

Features

- Advanced diagnostics
- Advanced installation utility
- PCI 2.2 compatible
- Traffic and troubleshooting LEDs
- Support for all popular operating systems
- 32-bit bus only
- 33/66MHz operation
- Fully IEEE 802.3z compliant
- 10/100/1000T auto-negotiation

Lifetime Warranty



Model	Dimensions	Weight
AT-2915T	14cm x 6.3cm	.2kg
AT-2916T	12.7cm x 12.1cm	.32kg
2930 V2 series	17cm x 9.5cm	.27kg
AT-2971SX/SC	19cm x 13cm	.32kg
AT-2971T	19cm x 13cm	.32kg

LAN Adapter Cards

100Mbps & 10/100Mbps, 10Mbps

AT-2800TX

Fast Ethernet CardBus PCI Adapter



AT-2800TX

10/100TX

Features

- Traffic and troubleshooting LEDs
- Support for all popular operating systems

Lifetime Warranty

AT-2400BT

Ethernet PCI Adapter



AT-2400BT

10T (BNC)

Features

- Advanced installation utility
- Traffic and troubleshooting LEDs
- Support for all popular operating systems

Lifetime Warranty

Model	Dimensions	Weight
AT-2400BT	13cm x 12cm	.18kg
AT-2451FTX	15cm x 11cm	.12kg
AT-2501TX	13cm x 12cm	.18kg
2700 series	15cm x 11cm	.12kg
AT-2800TX	8.5cm x 5.5cm	.18kg

2700 Series

Fast Ethernet PCI Adapters



AT-2701FX &
AT-2701FTX
models available in
**NEW LOW
PROFILE** design

AT-2701FX/SC	100FX (SC)
AT-2701FX/MT	100FX (MT-RJ)
AT-2701FX/ST	100FX (ST)
AT-2701FX/VF	100FX (VF-45)

AT-2701FTX/ST	100FX (ST) & 10/100TX
AT-2701FTX/SC	100FX (SC) & 10/100TX
AT-2701FTX/MT	100FX (MT-RJ) & 10/100TX

AT-2701TX	10/100TX
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AT-2746FX/ST	10FL (ST) 100FX (SC & ST)
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AT-2746FX/SC	10FL (SC) 100FX (SC & ST)
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Common features of the 2700 series

- PXE support
- VLAN support
- Advanced diagnostics
- Advanced installation utility
- PCI 2.2 compatible
- PXE remote booting available
- Traffic and troubleshooting LEDs
- Support for all popular operating systems
- Fault tolerant driver support
- ACPI/Wake On LAN (WOL) support
- Copper and fibre ports for flexibility (AT-2701FTX models only)

Lifetime Warranty

AT-2501TX & AT-2451FTX

Fast Ethernet PCI Adapters



AT-2501TX &
AT-2451FTX
models available in
**NEW LOW
PROFILE** design

AT-2501TX

10/100TX

Features

- Advanced diagnostics
- Advanced installation utility
- PCI 2.2 compatible
- PXE remote booting available
- Traffic and troubleshooting LEDs
- Support for all popular operating systems
- ACPI/Wake On LAN (WOL) support

Lifetime Warranty

AT-2451FTX/ST

10FL (ST) & 10/100TX

AT-2451FTX/SC

10FL (SC) & 10/100TX

Features

- Advanced diagnostics
- Advanced installation utility
- PCI 2.2 compatible
- PXE remote booting available
- Traffic and troubleshooting LEDs
- Support for all popular operating systems
- Fault tolerant driver support
- ACPI/Wake On LAN (WOL) support
- Copper and fibre ports for flexibility

Lifetime Warranty

Accessories for the AT-2501TX

AT-BP2501 PXE remote booting ROM for AT-2501TX.



I2 Service & Support Programs

Technical Support Numbers

Telephone support is available Monday through Friday between 0900 and 1730 local time (excluding national holidays).

To access technical support within your local area please find details posted at the following address

<http://www.alliedtelesyn.co.uk/support>

then select [Contact Technical support](#).

At Allied Telesyn we realise many of our customers want to take additional precautions to safeguard the integrity of networked data, ensure network up time, maximise end-user productivity while protecting their original investment well into the future. Net.Cover® is a flexible set of services and support programs that can be tailored to meet the needs of a wide range of customers. The service programs can be purchased over a one or three year term, and are renewable annually thereafter.

Please refer to **www.alliedtelesyn.com** for service availability in your country

	On-line services	Next Business Day e-mail response	Emergency telephone support, 24x7x365	Software updates and patches	Telephone support local business hours in your timezone	Advance replacement of defective hardware	Despatch Field Engineer	Assigned Software Engineer
Net.Cover® BASIC PLUS The Net.Cover® Basic Plus support plan gives you access to more services than Net.Cover® Basic. Ideal for environments requiring a high degree of network availability, data integrity and end-user productivity, the Net.Cover® Basic Plus plan includes faster replacement of hardware.	●	●	●	●	●	Next business day*		
Net.Cover® SILVER Net.Cover® Silver is designed to meet and exceed all the essential requirements of supporting and maintaining enterprise LANs. Ideal for mission-critical network environments that require a high degree of network availability, data integrity and end-user productivity. The Net.Cover® Silver plan includes faster on-site service and spares.	●	●	●	●	●	Next business day*	●	
Net.Cover® GOLD Net.Cover® Gold is also designed to address all the essential requirements of enterprise LANs, but with even faster response times for service and spare parts in case of emergency - within four hours, Monday-Friday, normal business hours. Ideal for mission-critical environments that require the highest degree of network availability.	●	●	●	●	●	Within 4 hours (8x5)	●	
Net.Cover® PLATINUM Net.Cover® Platinum is Allied Telesyn's most comprehensive support plan for mission-critical switched broadband networks. This plan ensures a very individualised, flexible and focused approach. Net.Cover® Platinum also adds dedicated level Escalation support engineers and our fastest on-site service and spares response time.	●	●	●	●	(24x7)	Within 4 hours (8x5)	●	
SILVER Software Support Program (SSSP) The Net.Cover® Silver Software support program offers high priority support in the event of a software failure. Ideal for network environments that require high availability, security and integrity. A software engineer will be assigned within 24 hours upon receipt of an inquiry.	●	●	●	●	●			Within 24 hours
GOLD Software Support Program (GSSP) The Net.Cover® Gold Software support program offers high priority support in the event of a software failure. Ideal for network environments that require high availability, security and integrity. This extended support offers an assigned software engineer within 4 hours upon receipt of an inquiry.	●	●	●	●	●			Within 4 hours

Service & Support Programs

All Allied Telesyn products carry at least a 2 year warranty coverage. During the first year the customer can take advantage of the enhanced warranty benefits whilst during the second year the product is covered by a standard warranty program.

If the product continues with a bundled Net.Cover® contract, the warranty conditions will be replaced for the duration of the contract.

After the Net.Cover® contract coverage has expired, the product will return to the standard warranty conditions.

Net.Cover® REGISTRATION

All Allied Telesyn Layer 2 switches & Layer 3 switches and routers include a Net.Cover® Basic Plus Service Contract. To take advantage of this service and support coverage, you must register to activate your services:

- On-line at www.alliedtelesyn.co.uk/support
- Or by completing the registration form on the CD-ROM included with your Allied Telesyn product and fax to Europe +44 1793 501413

Additional Service Option

Hardware Installation Service

An Allied Telesyn Network Specialist will go on-site to install and perform functional tests on individual Allied Telesyn products to ensure the new unit is operating properly.

Configuration Services

Allied Telesyn provides configuration consulting to customers requiring technical assistance in developing and implementing complex hardware configurations. This service will be carried out at our premises by an Allied Telesyn engineer and the result of the configuration be forwarded to the customer.

Total Implementation Service

Combines both Hardware Installation and Configuration at a reduced cost to offer a total solution to customers.

PROFESSIONAL SERVICES PROGRAMS

- Network Consultancy
- Network Deployment
- Remote Network Monitoring
- On-site Configuration and Installation
- Total Network Implementation

For more info Europe and U.S. :

<http://www.alliedtelesyn.co.uk/support>

TRAINING PROGRAMS

- Product training
- Certification training
- Technology training
- Train-the-Trainer

For more info Europe and U.S. :

<http://www.alliedtelesyn.co.uk/support>

ATI On-line Solutions (AOS) (Basic Plus, Silver, Gold, Platinum, SSSP, GSSP)

Allied Telesyn offers a Web-based, on-line support and information service that is available 24 hours a day, 7 days a week. Services include access to Allied Telesyn's extensive Knowledge Base with solutions to common questions and problems, and quick access to drivers, bug fixes, and software updates at the customer's fingertips.

Software Subscription Service (SSS) (Basic Plus, Silver, Gold, Platinum, SSSP, GSSP)

Allied Telesyn's annual Software Subscription Service offers Net.Cover® customers notification and access of software patches, bug fixes and updates applying to Allied Telesyn hardware product's OS software.

Technical Assistance Center (TAC) (Basic Plus, Silver, Gold, SSSP, GSSP)

Customers receive toll-free phone or e-mail access to Allied Telesyn's TAC team. An Allied Telesyn network support engineer troubleshoots the problem within your specified network environment and validates or identifies and isolates the failure.

Rapid Response Support (RRS) (Basic Plus, Silver, Gold, Platinum, SSSP, GSSP)

In the event of a network down condition occurring, Allied Telesyn provides Rapid Response emergency/network-down telephone support 24 hours a day, 7 days a week, 365 days a year.

Advance Replacement Services (AR2) (Basic Plus)

In the unlikely event of a hardware failure, AR2 provides a hardware replacement unit that will ship the same day if a request is received before 2:00pm PST (US) or GMT (Europe). AR2 is accessible through the TAC.

On-site Replacement and Hardware Maintenance Services On-Site 8x5xNBD (Silver)

The On-site Replacement service program provides a skilled network engineer to arrive on-site next business day to perform the installation and configuration of replacement devices during local business hours, Monday-Friday (except local holidays).

On-site Replacement and Hardware Maintenance Services On-Site 8x5x4 (Gold)

Same service as Silver, but network engineer will arrive on-site within 4 hours.

On-site Replacement and Hardware Maintenance Services On-Site 24x7x4 (Platinum)

Same service as Gold, but coverage is ensured 24 hours a day, 7 days a week, 365 days a year. Customers can also get access to technical support through the TAC, 24 hours a day, 7 days a week, 365 days a year.

Available Services	ATI Standard		Basic Plus [†]	Silver	Gold	Platinum	SSSP 1	GSSP 2
	Standard warranty	Enhanced warranty ◇						
Warranty Duration return to factory and repair	●	●	●	●	●	●		
30 days DOA - new product replacement		●	●	●	●	●		
1 year advanced replacement shipped within 10 business days		●						
1 year advanced replacement shipped within 5 business days								
1-3 year(s) advanced replacement Next Business Day (1)			●	●	●	●		
On-site engineer for part replacement Next Business Day*				●	●			
On-site engineer for part replacement Within 4 hours*					●	●		
On-site engineer for part replacement 24 x 7 x 4h						●		
1 year limited Tech Support access*		●						
1-3 years(s) priority Tech Support access*			●	●	●	●		
Emergency/Network down Telephone support 24 hours, 7 days a week			●	●	●	●	●	●
24 hours, 7 days a week, 365 days a year Access to Technical Support						●		
1 year OS software updates (on request when applicable)		●						
1-3 year(s) Software Updates Notification and Access				●	●	●	●	
1 year Software Upgrades Notification and Access							●	●
On-line services public access	●	●	●	●	●	●	●	●
1-3 year(s) on-line services private access (password)			●	●	●	●	●	●
Assigned Software Engineer Within 24 Hours							●	
Assigned Software Engineer Within 4 Hours								●

For more information on Allied Telesyn Net.Cover® Services, visit our website at www.alliedtelesyn.com/netcover

(1) Next Business Day

* Business hours

◇ First year only

† As standard on Managed Switches & Routers

1 SSSP (Silver Software Support Program)

2 GSSP (Gold Software Support Program)

Service & Support Programs

Certification & Training

Training and Certification

The Allied Telesyn training program is designed for you and your job. Technicians, engineers, resellers or network administrators, regardless of the position, Allied Telesyn have a program suited just for your needs. Anyone who must deal with the responsibilities of installing, troubleshooting, post sales support or maintaining the hardware within your network will find these certifications valuable.

The goals are to teach you about Allied Telesyn's products and the technologies that manage them. These courses incorporate hands-on on lab practice with instructor led training in an environment that simulates a real network.

Allied Telesyn offers non-certification classes on basic technologies, and certification classes in Certified Installer, Certified System Engineer and Certified Instructor.

Why Become Certified on Allied Telesyn Products?

The networking industry is constantly seeking qualified Internet experts and professionals. Enhance your opportunities for advancement in this arena by achieving certification on Allied Telesyn products. Certification is a testament to your dedication and knowledge, and will advance your company into a higher echelon of excellence.

Becoming Allied Telesyn certified is not simple, it requires hands-on experience with the products in addition to training. There is an enormous learning advantage in the experience of solving real-world network problems that books and software simulations simply cannot provide.

Allied Telesyn offers certifications for our Switch and Router products ranging from Installer level to System Engineer. We also have certified trainer courses designed for those interested in becoming a Training Partner.

Certifications Offered

Each class covers product features, benefits, applications, installation, troubleshooting, and competitive positioning. A Certification Test is administered at the end of each class. A comprehensive Applications & Solutions Test covering the integration of all products is required for Allied Telesyn certified resellers.

Allied Telesyn offers three types of certification:

- 1 Certified Allied Telesyn Installer (CAI)
- 2 Certified Allied Telesyn System Engineer (CASE)
Certified Allied Telesyn Instructor (IBT and IAT)

These different types of certification have been designed so that you can choose the program that best fits your needs or the needs of your organisation. CAI and CASE certification provide basic or advanced knowledge of installation and configuration of Layer 3 Switches and Routers and Network Management. These courses are available to any technical staff from resellers or end-users complying with the related prerequisites and can be delivered by an Allied Telesyn subsidiary or at an Allied Telesyn Net.Cover® Training Partner Centre.

IBT and IAT certification provides the same installation and configuration skills as the CAI and CASE certifications, but with an emphasis on how to pass these skills on to your own staff and customers. These courses are reserved for authorised Net.Cover® Training Partners only, and will only be offered at Allied Telesyn Training Centres.

For more information concerning courses specifications, agendas and certified Training Partners, visit www.alliedtelesyn.co.uk/support or call your local Allied Telesyn office today

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AT-2701FX/VF	61	AT-FS7016	24	AT-RG624B	39
AT-2746FX/ST	61	AT-FS7024	24	AT-RG634A	39
AT-2746FX/SC	61	AT-FS7009E	24	AT-RG634B	39
AT-2800TX	61	AT-FS7009E	24	AT-RG644A	39
AT-2915T	60	AT-FS7109GB	24	AT-RG644B	39
AT-2916T	62	AT-FS705EFC	24	AT-RG656BD	39
AT-2930SX	60	AT-FS705L	24	AT-RP16fi	13
AT-2930T	60	AT-FS705LE	24	AT-RP24i	13
AT-2971SX/SC	60	AT-FS708	24	AT-RP48i	13
AT-2971T	60	AT-FS708L	24	AT-RPG6	12
AT-8012M	19	AT-FS708LE	24	AT-RPG6f	12
AT-8012M-QS	19	AT-FS709EFC	24	AT-SB4104	3
AT-8016F/SC	19	AT-FS709FC	24	AT-SB4108	3
AT-8016F/MT	19	AT-FS713FC	24	AT-SB4211	4/5
AT-8024	19	AT-FS716	24	AT-SB4161	4/5
AT-8024GB	19	AT-FS716L	24	AT-SB4215	4/5
AT-8024M	19	AT-FS716LE	24	AT-SB4261	4/5
AT-8026FC	19	AT-FS717FC	24	AT-SB4262	4/5
AT-8026T	19	AT-FS724L	24	AT-SB4311	4/5
AT-8088/SC	19	AT-GS905	23	AT-SB4352	4/5
AT-8088/MT	19	AT-GS908	23	AT-SB4411A	4/5
AT-8224XL	23	AT-GS908GB	23	AT-SB4412	4/5
AT-8326GB	20	AT-GS916	23	AT-SB4451A	4/5
AT-8350GB	20	AT-GS916GB	23	AT-SB4452A	4/5
AT-8400	18	AT-GS924	23	AT-SB4461A	4/5
AT-8516F/SC	21	AT-GS924GB	23	AT-SB4462A	4/5
AT-8516F/MT	21	AT-GS924i	23	AT-SB4541A	4/5
AT-8524M	21	AT-LX3800U	25	AT-Upgrade Manager	44
AT-8550/GB	21	AT-LX3811	25	AT-VIEW PLUS 2.4	43
AT-8550/SP	21	AT-MC1001	57	AT-VP500 SIP Server	40
AT-8624T/2M	16	AT-MC1004	57	AT-VP500 Unit Network Manager	40
AT-8648T/2SP	16	AT-MC1005	57	AT-VP604E FXO	41
AT-8724XL	17	AT-MC101XL	57	AT-VP604E FXS	41
AT-8748XL	17	AT-MC102XL	57	AT-VP624E FXS	41
AT-8824	15	AT-MC103LH	57	AT-VP708	41
AT-8848	15	AT-MC103SC	57	AT-VP730	41
AT-8948A	8	AT-MC103XL	57	AT-WA1004G	50
AT-8948B	8	AT-MC104LH	57	AT-WA3404	50
AT-9410GB	23	AT-MC104SC	57	AT-WA7500	50
AT-9424T/GB	22	AT-MC104XL	57	AT-WA7501	50
AT-9424T/SP	22	AT-MC115XL	57	AT-WCC200G	50
AT-9724TS	14	AT-MC116XL	57	AT-WCL007	50
AT-9812T	10	AT-MC13	57	AT-WCL452	50
AT-9816GB	10	AT-MC14	57	AT-WCL460	51
AT-9924T	9	AT-MC15	57	AT-WCP200G	51
AT-9924SP	9	AT-MC601	59	AT-WD1008	25
AT-9924T/4SP	9	AT-MC602	59	AT-WG2300	25
AT-AR210	35	AT-MC603	59	AT-WG3300	25
AT-AR215	35	AT-MCF06	59	AT-WG4300	25
AT-AR220E	35	AT-MCF106	59	AT-WL2411	51
AT-AR221E	35	AT-MCF112	59	AT-WM3400	51
AT-AR240E	34	AT-MCF12	59	Castle Rock SNMPc 7.0	44
AT-AR250E	34	AT-MCRI2	56	Net.Cover	62
AT-AR255E	34	AT-NMI290	29	NMS Telesyn 3.0	42
AT-AR267	34	AT-NMI291	29	Rapier 16fi	13
AT-AR320	37	AT-NMI292	29	Rapier 24i	13
AT-AR320S	37	AT-NMI365	29	Rapier 48i	13
AT-AR410	33	AT-PB1001	56	Rapier G6	12
AT-AR410S	37	AT-PB1005G	56	Rapier G6f	12
AT-AR440S	36	AT-PB101	56	Net.Cover	62
AT-AR441S	36	AT-PB102	56	Telesyn 7100	27
AT-AR442S	36	AT-PB103	56	Telesyn 7400	27
AT-AR450S	36	AT-PB13	56	Telesyn 7700	27
AT-AR725	32	AT-PB14	56	Telesyn 9400	26
AT-AR745	32	AT-PB15	56	Telesyn 9700	26
AT-EX1002SC	57	AT-PB201	56	ZTC (Zero Touch Configurator)	38
AT-FS201	58	AT-PB202	56		
AT-FS202	58	AT-PB204	56		

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