Allied Telesyn
Product Catalogue
Issue 2 | 2003

Only nature can do better.

Allied Telesyn

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 has an infrastructure which now employs approximately 2,500 full-time employees worldwide with a wide range of experience and expertise in the research, development, sales, support and distribution of its premier networking technologies. The number of full-time employees within the company has grown consistently since 1987 and the company's success and effective business management have allowed it to recruit and hire while many others in the industry have downsized during recent industry downturns.

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.

Allied Telesyn has recently introduced a new company into Europe, Corega.

featured in this issue
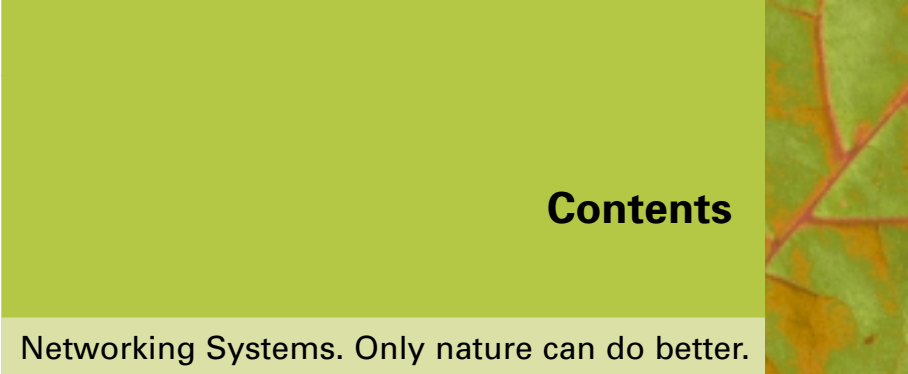
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Networking Systems. Only nature can do better.

page 1

1 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
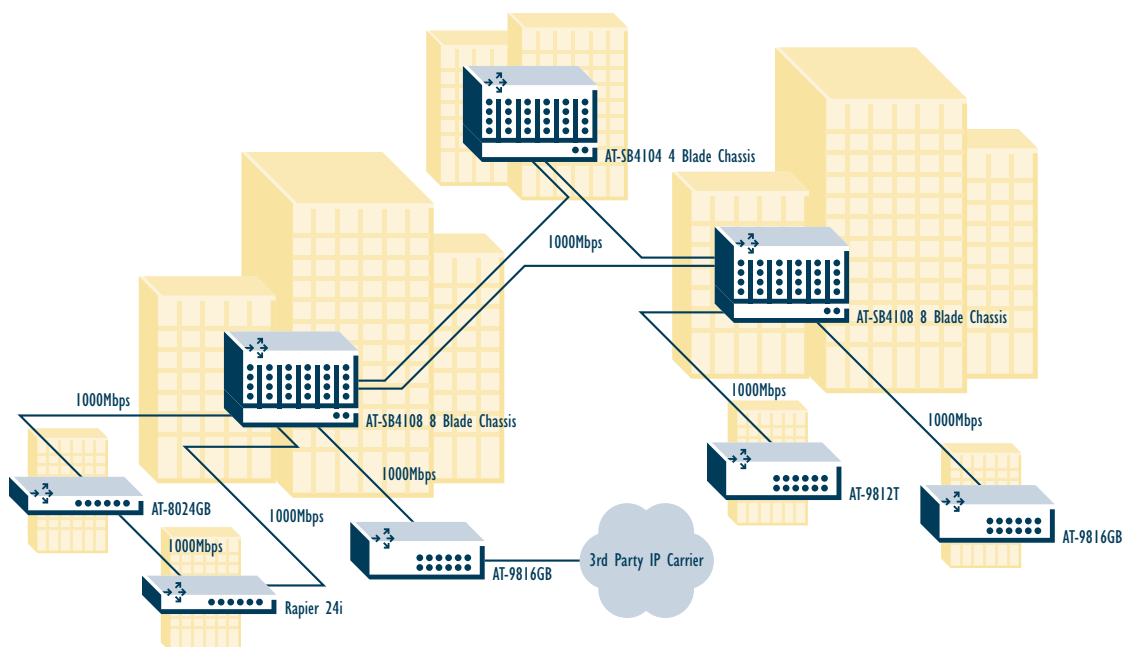
In the scenario above, a Metropolitan Ethernet Provider (MEP) is provisioning an Ethernet service to a number of Multi-Tenant Unit (MTU) complexes. Each complex owner is providing tenants with voice and data services and requires 1000Mbps feeds to each building and rate limited Ethernet service to each 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 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 & QoS at wirespeed.

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

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

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

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 *

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

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.

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

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.

* Check with your sales representative for availability

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

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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

MODEL	DIMENSIONS	WEIGHT
AT-SB4108	62cm x 44cm x 34cm	63.6kg
AT-SB4104	40cm x 44cm x 34cm	36.1kg

POWER SUPPLY
- Power load sharing
- IEC inlets in rear
- 110-240vAC 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

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SWITCHBLADE
Multi-layer Modular Switch

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 & 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

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 wirespeed 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

Net.Cover®

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

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	8 x 10/100/1000T (RJ45) ports
AT-SB4412A	24 x 10/100/1000T (RJ45) ports *
AT-SB4451A	8 x 1000SX (SC) ports
AT-SB4452A	8 x 1000SX (MT-RJ) ports
AT-SB4441A	8 x 1000 GBIC Slot
AT-SB4461A	8 x 1000LX (SC) Slots
AT-SB4462A	8 x 1000LX (MT-RJ) Slots

POWER SUPPLIES

AT-SB4161-30	AC PSU for UK
AT-SB4161-50	AC PSU for UE
AT-SB4161-80	DC PSE -48V

* Check with your sales representative for availability

SWITCHBLADE
Blade Cards & Modules

AT-SB4211A
Switch Controller

- Status LEDs

- Ethernet port

- Terminal console port

AT-SB4215
Bandwith Expander
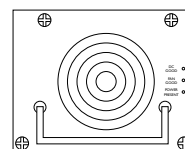
AT-SB4161
Power Supply Unit

- Status LEDs

AT-SB4411A
Gigabit Ethernet Line Card

- 8 x 110/100/1000T ports
  RJ45 connectors with LEDs

- Optional CAM memory
  AT-SB4261

AT-SB4451A
Gigabit Ethernet Line Card

- 8 x 1000SX ports
  SC connectors with LEDs

- Optional CAM memory
  AT-SB4262

AT-SB4452A
Gigabit Ethernet Line Card

- 8 x 1000SX ports
  MT-RJ connectors with LEDs

- Optional CAM memory
  AT-SB4262

AT-SB4441A
GBIC Line Card

- 8 x 1000 GBIC ports
  RJ45 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-SB4462A
Gigabit Ethernet Line Card

- 8 x 1000LX ports
  MT-RJ connectors

- Optional CAM memory
  AT-SB4262

AT-SB4311
Fast Ethernet Line Card

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

AT-SB4352
Fast Ethernet Line Card

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

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

AT-SB4262
Line CAM Memory
(AT-SB424xx only)

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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 heterogenous 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.

EXAMPLE: 9800 SERIES CORE APPLICATION EXAMPLE
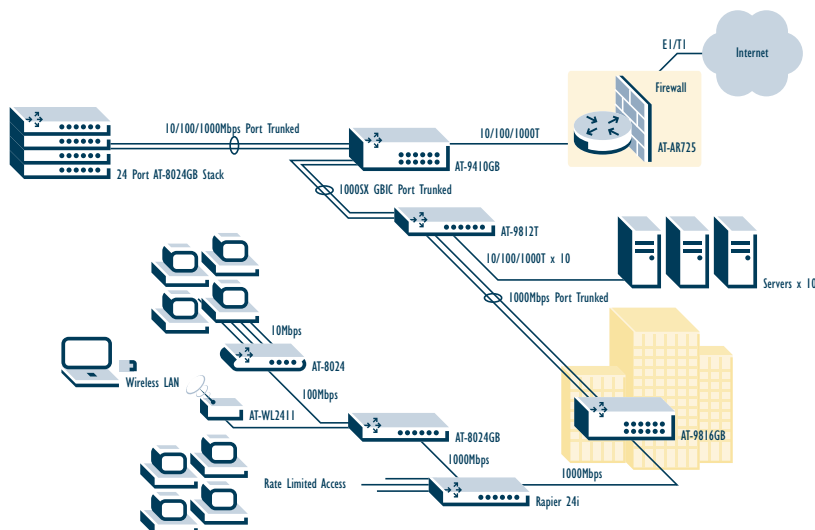
The network core of a medium-sized company is built around the 9800 series of Layer 3+ Gigabit Ethernet standalone switches. As well as acting as the primary aggregator for a stack of high-density Fast Ethernet Layer 2 switches and other Layer 2 and Layer 3 workgroup devices, a second 9800 series switch 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 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.

SWITCH SELECTOR

MULTI-LAYER SWITCHES

1000Mbps & 1000Mbps copper > > >	AT-9812T	10/100/1000T x 12 ports, GBIC bays x 4	8
1000Mbps > > >	AT-9816GB	GBIC bays x 16	8

LAYER 3 SWITCHES

1000Mbps fibre > > >	Rapier G6f	1000SX or 1000LX x 6 ports (SC), Expansion bays x 2	10
1000Mbps copper > > >	Rapier G6	10/100/1000T x 6 ports, Expansion bays x 2	10
100Mbps fibre > > >	Rapier 16fi > > >	100FX x 16 ports (SC or MT-RJ), Expansion bays x 2 Supports Network Service Module (NSM)	11
10/100Mbps copper > > >	Rapier 24i > > >	10/100TX x 24 ports, Expansion bays x 2 Supports Network Service Module (NSM)	11
	Rapier 48i	10/100TX x 48 ports, Expansion bays x 2	11

LAYER 3-7 SWITCHES

10/100Mbps copper > > >	AT-8824	10/100TX x 24 ports Fast Ethernet, GBIC bays x 2	13
	AT-8848	10/100TX x 48 ports Fast Ethernet, GBIC bays x 2	13

LAYER 2-4 SWITCHES

10/100Mbps copper > > >	AT-8724XL	10/100TX x 24 ports, Expansion bays x 2	14
	AT-8748XL	10/100TX x 48 ports, Expansion bays x 2	14

LAYER 2 MANAGED STACKABLE SWITCHES

1000Mbps & 10/100Mbps copper > > >	AT-8324	10/100TX x 24 ports, Expansion bays x 2	17
	AT-8326GB	10/100TX x 24 ports, 10/100/1000T x 2 ports, GBIC bays x 2	17
	AT-8350GB > > >	10/100TX x 48 ports, 10/100/1000T x 2 ports GBIC bays x 2, Expansion bay x 1	17
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	15
100Mbps fibre > > >	AT-8016F/MT	100FX (MT-RJ) x 16 ports, Expansion bays x 2	16
	AT-8016F/SC	100FX (SC) x 16 ports, Expansion bays x 2	16
10/100Mbps copper > > >	AT-8012M	10/100TX x 24 ports, Expansion bay x 1	16
	AT-8024GB	10/100TX x 24 ports, GBIC bays x 2	16
	AT-8024M	10/100TX x 24 ports, Expansion bays x 2	16
	AT-8024	10/100TX x 24 ports	16
	AT-8026FC	10/100TX x 24 ports, 100FX (SC) x 2 ports	16
	AT-8026T	10/100TX x 24 ports, 10/100/1000T x 2 ports	16
10/100Mbps copper & 100Mbps fibre > > >	AT-8088/SC	10/100TX x 8 ports, Expansion bays x 2	16
	AT-8088/MT	10/100TX x 8 ports, 100FX (MT-RJ) x 8 ports, Expansion bays x 2	16

LAYER 2 MANAGED SWITCHES

10/100/1000Mbps copper > > >	AT-9410GB	10/100/1000T x 10 ports, GBIC bays x 2	18
100Mbps fibre > > >	AT-8216FXL/SC	100FX (SC) x 16 ports, Expansion bays x 2	18
	AT-8216FXL/MT	100FX (MT-RJ) x 16 ports, Expansion bays x 2	18
10/100Mbps copper > > >	AT-8224XL	10/100TX x 24 ports, Expansion bays x 2	18

LAYER 2 UNMANAGED SWITCHES

10/100Mbps copper with external power supply > > >	AT-FS705L	10/100TX x 5 ports, external power supply	19
	AT-FS705LE	10/100TX x 5 ports, external power supply	19
	AT-FS708LE	10/100TX x 8 ports, external power supply	19
	AT-FS716E	10/100TX x 16 ports, external power supply	19
10/100Mbps copper with fibre uplink & external power supply > > >	AT-FS705EFC	10/100TX x 4 ports, 100FX (SC) x 1 port, external power supply	19
	AT-FS709EFC	10/100TX x 8 ports, 100FX (SC) x 1 port, external power supply	19
10/100Mbps copper with fibre uplink > > >	AT-FS709FC	10/100TX x 8 ports, 100FX (SC) x 1 port	19
	AT-FS713FC	10/100TX x 12 ports, 100FX (SC) x 1 port	19
	AT-FS717FC	10/100TX x 16 ports, 100FX (SC) x 1 port	19
10/100Mbps copper > > >	AT-FS708	10/100TX x 8 ports	19
	AT-FS716	10/100TX x 16 ports	19
	AT-FS724i	10/100TX x 24 ports	19

LAYER 2 UNMANAGED GIGABIT SWITCHES

10/100/1000Mbps copper > > >	AT-GS908	10/100/1000TX x 8 ports	19
	AT-GS908GB	10/100/1000TX x 8 ports, GBIC bays x 2 ports	19
	AT-GS924	10/100/1000TX x 24 ports	19

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9800 Series
Multi-layer Switches

AT-9812T   10/100/1000T x 12 ports
                      GBIC bays x 4

AT-9816GB   GBIC bays x 16

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 100-240vAC
- -48vDC power supply option * (factory installed)
- Graphical User Interface
- Redundant power supply option

TWO YEAR WARRANTY + 1 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

* 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

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 |

MODEL	DIMENSIONS	WEIGHT
AT-9812T	44cm x 36cm x 6.6cm	6.6kg
AT-9816GB	44cm x 36cm x 6.6cm	6.6kg

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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 (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 & 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

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

RAPIER 'G' Series
Layer 3 Gigabit Ethernet Switches

Rapier G6 10/100/1000T x 6 ports
Expansion bays x 2
(Part # AT-RPG6)

Rapier G6f 1000SX or 1000LX x 6 ports (SC)
Expansion bays x 2
(SX Part # AT-RPG6FSX)
(LX Part # AT-RPG6FLX)

Common features of the Rapier 'G' series
- Wirespeed IP Layer 3 routing performance
- 35Gbps non-blocking switch fabric for low latency

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)
- IEEE 802.1x
- IP RIPv1/v2, OSPFv2
- Real-time application
- VRRP (Virtual Router Redundancy Protocol)
- Console, Telnet, Web-browser, SSH, SNMP and RMON
- Universal 100-240vAC, 50/60Hz power supply
- Stateful Inspection Firewall option
- -48vDC power supply option (factory installed)
- Redundant power supply option
- 1.5 U, 19" rackmount chassis

TWO YEAR WARRANTY + 1 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

Rapier 'G' & 'i' series expansion modules
AT-A35SX   1000SX x 1 port (SC)
AT-A35LX   1000LX x 1 port (SC)
AT-A39T   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 *

Rapier '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

AlliedWare™
The Rapier '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 42.

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

Rapier™

NSM AT-AR040

AT-AR020
1 x PRI port

AT-AR021
1 x BRI port

Net.Cover®

Our comprehensive service and support plans designed to protect your network investments well into the future.
See pgs 56-60 for details

MODEL	DIMENSIONS	WEIGHT
Rapier 'G' series	44cm x 36cm x 6.6cm	5.5kg

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RAPIER 'i' Series
Layer 3 Fast Ethernet Switches

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)

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 100-240vAC, 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)

TWO YEAR WARRANTY + 1 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

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 42.

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AT-AR024
4 x Async ports

AT-AR023
1 x Sync port

MODEL	DIMENSIONS	WEIGHT
Rapier 'i' series	44cm x 36cm x 6.6cm	5.5kg

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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. Combining this with the Stateful Inspection Firewall, your network will remain safe and secure. Top all this off with our intuitive GUI, which allows for quick and painless configuration and management.

The 8800 series Intelligent Workgroup Switches have asymmetric bidirectional bandwidth limiting, per port or per QoS traffic class. Bandwidth limiting lets you define throughput levels on an individual client basis. For example, you may want to assign more bandwidth to a campus library than student accommodation. Delivering an industry-leading implementation of this feature, the 8800 series Intelligent Workgroup Switches provide the finest bandwidth granulation available in Layer 3 products.

The Quality of Service (QoS) feature allows you to prioritise traffic according to its importance. You can be assured of reliable performance during peak usage periods, and continuous transmission of streaming media.

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

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 RIPing
- OSPF v2
- 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

LIFETIME LIMITED WARRANTY + 1 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

* 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

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

MODEL	DIMENSIONS	WEIGHT
8800 series	44cm x 33cm x 4.5cm	5kg

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See pgs 56-60 for details

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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

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

TWO YEAR WARRANTY + 1 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

* Check with your sales representative for availability

8700XL series expansion modules
AT-A35SX	1000SX x 1 port (SC)
AT-A35LX	1000LX x 1 port (SC)
AT-A39T	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

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

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 queuing/scheduling function at egress
- QoS classification of incoming packets for QoS

PORT SECURITY FEATURES
- User selectable value of threshold per port
- User selectable Limited Mode or Secure Mode per port
- User selectable Disable/Enable Intrusion Detection, per port
- Intrusion Detection
  - Notify with trap and disable the port
  - Notify with trap only
  - Disable the port only
  - No action
- Save all statically assigned entries on disable action

CLASSIFICATION
- Source IP address
- Source MAC address
- Destination MAC address
- 16-bit ethertype classification

MULTICAST
- IGMP
- IGMP snooping
- IGMP proxy
- MVR

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

LAN FEATURES
- Port based VLAN
- IEEE 802.1Q tagged VLAN
- VLAN Pass through support
- Overlapping VLAN
- Private VLAN
- VLAN Relay

MODEL	DIMENSIONS	WEIGHT
8700XL series	44cm x 36cm x 6.6cm	5.5kg

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.

8400 Series
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

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

LIFETIME LIMITED WARRANTY + 3 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

Two years on PSU

* Check with your sales representative for availability

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) *

Features
- 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

MODEL	DIMENSIONS	WEIGHT
AT-8400	30.5cm x 43.5cm x 15.6cm	13kg

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SWITCHES
/100/1000Mbps • Layer 2

8000 Series
Layer 2 Managed Stackable Fast Ethernet Switches

ENHANCED STACKING™

Model	Spec
AT-8012M	10/100TX x 24 ports Expansion bays x 1
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 & SNMP
- IEEE 802.1Q VLAN tagging
- IEEE 802.1p Class of Service
- -48vDC power supply option (AT-8024M & AT-8016F)
- Redundant power supply option (AT-8024M & AT-8016F)

LIFETIME LIMITED WARRANTY + 3 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

Five years on PSU

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

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See pgs 56-60 for details

MODEL	DIMENSIONS	WEIGHT
8000 series	44cm x 19cm x 4.5cm	2.7kg
AT-8012M	44cm x 21cm x 4.4cm	2.2kg
AT-8088	44cm x 19cm x 4.4cm	3.5kg

8300 Series
Layer 2 Managed Stackable Fast Ethernet Switches

AT-8324 10/100TX x 24 ports
Expansion bays x 2

Features
- Mix copper & fibre in a stack
- 802.1Q VLAN tagging
- 802.1p Class of Service
- IGMP snooping
- Enhanced Stacking™ not supported
- Features Web-based management & SNMP
- Stackable up to 4

LIFETIME LIMITED WARRANTY + 3 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

Five years on PSU

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 LIMITED WARRANTY + 3 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

Five years on PSU

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-PWR3001   Additional redundant power supply with cable

MODEL	DIMENSIONS	WEIGHT
8300 series	44cm x 36cm x 6.6cm	5.5kg

AT-9410GB
Layer 2 Managed Gigabit Ethernet Switch

AT-9410GB   10/100/1000T x 10 ports
GBIC bays x 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

LIFETIME LIMITED WARRANTY + 3 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

Five years on PSU

8200XL Series
Layer 2 Managed Fast Ethernet Switches

AT-8216FXL/MT   100FX (MT-RJ) x 16 ports
Expansion bays x 2

AT-8216FXL/SC   100FX (SC) x 16 ports
Expansion bays x 2

AT-8224XL   10/100TX x 24 ports
Expansion bays x 2

Features
- 13.3Gbps switch fabric
- Non-blocking
- Wirespeed forwarding
- 255 VLANs
- IEEE 802.1Q VLAN tagging
- IEEE 802.1p Class of Service
- IGMP snooping
- Features Web-based management & SNMP

LIFETIME LIMITED WARRANTY + 3 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

(AT-8224XL only)

Five years on PSU

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MODEL	DIMENSIONS	WEIGHT
AT-9410GB	44cm x 36cm x 6.6cm	5.5kg
8200XL series	44cm x 36cm x 6.6cm	5.5kg

FS700 Series
Layer 2 Unmanaged Fast Ethernet Switches

AT-FS705 L	10/100TX x 5 ports, external power supply
AT-FS705LE	10/100TX x 5 ports, external power supply
AT-FS708	10/100TX x 8 ports
AT-FS708LE	10/100TX x 8 ports, external power supply

Features
- Auto MDI/MDI-X
- Compact size

LIFETIME LIMITED WARRANTY Two years on PSU

AT-FS705EFC	10/100TX x 4 ports, 100FX (SC) x 1 port, external power supply
AT-FS709EFC	10/100TX x 8 ports, 100FX (SC) x 1 port, external power supply
AT-FS709FC	10/100TX x 8 ports, 100FX (SC) x 1 port
AT-FS713FC	10/100TX x 12 ports, 100FX (SC) x 1 port
AT-FS717FC	10/100TX x 16 ports, 100FX (SC) x 1 port

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

Features
- All ports auto MDI/MDI-X
- Fibre uplink
- Compact size

LIFETIME LIMITED WARRANTY Two years on PSU

AT-FS716	10/100TX x 16 ports
AT-FS716E	10/100TX x 16 ports, external power supply

Features
- Auto MDI/MDI-X

LIFETIME LIMITED WARRANTY Two years on PSU

AT-FS724i	10/100TX x 24 ports

Features
- All ports auto MDI/MDI-X

LIFETIME LIMITED WARRANTY Two years on PSU

Common features of the FS700 series
- Wirespeed forwarding
- IEEE 802.3 standards compliant
- Transparent to VLAN packets

GS900 Series
Layer 2 Unmanaged Gigabit Switches

AT-GS908	10/100/1000TX x 8 ports
AT-GS908GB	10/100/1000TX x 8 ports GBIC bays x 2 ports
AT-GS924	10/100/1000TX x 24 ports

Features
- Store-and-Forward switching mode
- Wirespeed non-blocking switching architecture
- 8MB Buffer memory
- 8,000 MAC addresses
- Fully auto-negotiating 10/100/1000Mbps speeds and full/half-duplex modes

LIFETIME LIMITED WARRANTY

MODEL	DIMENSIONS	WEIGHT
AT-FS705L	19.6cm x 11.6cm x 3.6cm	.61kg
AT-FS705LE	10cm x 7.9cm x 2.6cm	.3kg
AT-FS708	24.9 x 11.6cm x 3.6cm	.9kg
AT-FS708LE	15cm x 7.8cm x 2.6cm	.5kg
AT-FS705EFC	17.9cm x 9.8cm x 1.7cm	.36kg
AT-FS709EFC	N/A	N/A
AT-FS709FC	30.4cm x 18.2cm x 3.8cm	1.7kg
AT-FS713FC	29.5cm x 11.5cm x 4cm	.93kg
AT-FS717FC	29.5cm x 11.5cm x 4cm	.93kg
AT-FS716	33cm x 20.3cm x 3.8cm	2.1kg
AT-FS716E	33cm x 20.3cm x 3.8cm	2kg
AT-FS724i	44cm x 17.1cm x 6.58cm	5kg
GS900 series	44cm x 19cm x 4.5cm	2.7kg

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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. Allied Telesyn's IP+Optical solutions are designed to efficiently handle the challenges of today's MANs by combining transport capabilities and capacity that offer maximum flexibility, density and reliability over long distances. Based on Coarse Wavelength Division Multiplexing (CWDM) technology, Allied Telesyn IP+Optical solutions form the core of a cost-optimised, managed platform that supports different services and network topologies.

EXAMPLE: POINT TO POINT CONNECTION BETWEEN TWO SITES USING ALLIED TELESYN'S IP & OPTICAL SOLUTION

8 GIGABIT FULL-DUPLEX LINK
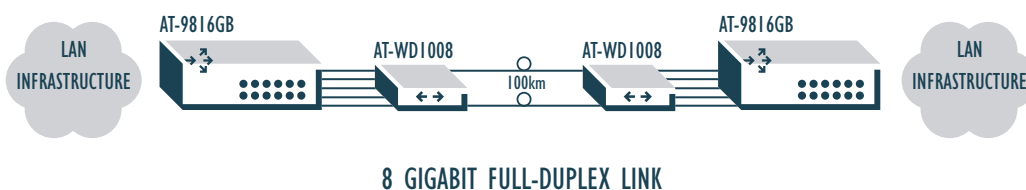
The two locations are 70km apart. A pair of SMF fibre links both sites together. Connection between the two locations is achieved through a dedicated pair of single-mode fibres (SM) ITU-T G.652. Since the two sites are located in densely populated cities, prices for renting fibres are extremely expensive. The network in each site is connected into the SM fibres using Allied Telesyn's Coarse Wave Division Multiplexing (CWDM) device – the AT-WD1008. The AT-WD1008 multiplexes up to 8 Gigabit wavelengths into a pair of SM fibres to provide an 8 Gigabit trunk connection between each site. In this way the cost associated with fibre rent drops dramatically thanks to the CWDM solution.

AT-WD1008
Gigabit Ethernet CWDM

AT-WD1008   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 100-240vAC, 50/60Hz power supply
- -48vDC power supply option

TWO YEAR WARRANTY + 1 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

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-WD1008 Expansion Modules

AT-WDRPS	Redundant power supply module
AT-WDM02	Management module
AT-WDFAN01	Fan module for AT-WD1008

8 Gigabit Ethernet Wavelengths CWDM Optical System

The AT-WD1008 is a CWDM (Coarse Wavelength Division Multiplexing) solution that multiplexes up to 8 light wavelengths to transmit signals over a single pair of optical fibre. CWDM technology is a key component of building an Ethernet MAN network because it reduces the operational cost of a fibre infrastructure (rental and/or maintenance).

The AT-WD1008 allows scalable and efficient Gigabit Ethernet services. The combination of CWDM and GBIC enables the design of a flexible and highly reliable multi-service network. The AT-WD1008 solution offers a cost-effective solution to build an Ethernet Everywhere solution in a campus or metropolitan-area network environment.

MODEL	DIMENSIONS	WEIGHT
AT-WD1008	44cm x 30.5cm x 8.5cm	8.4kg

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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
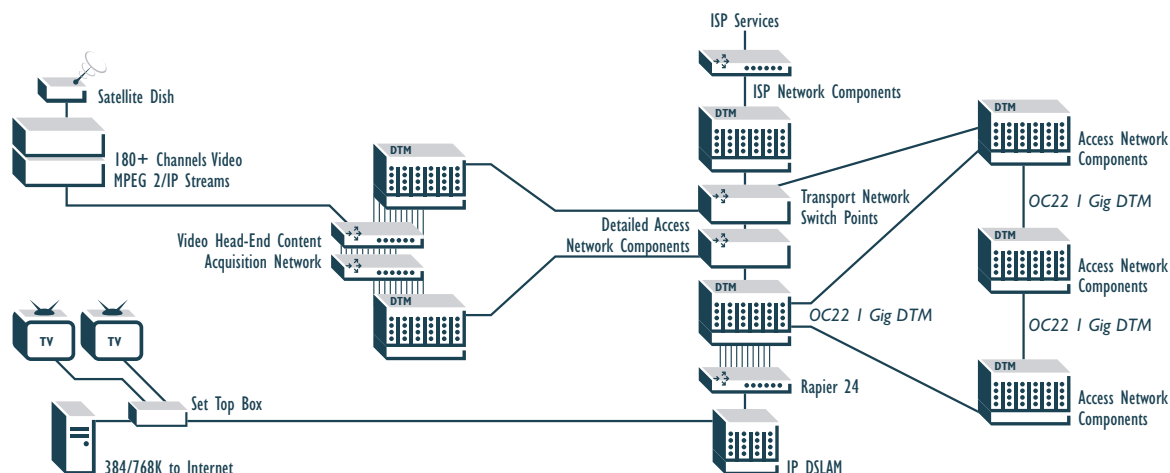
NM1000 Series
DTM SWITCHES

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

NM200 Series
DTM SWITCHES

AT-NM1290 **290 DTM Switch**

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

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

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 622 Trunk Module
	1310nm, 15Km

AT-NM1365 access modules

AT-NM1011/12	8 x ports E1 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	220vAC/-48vDC power inverter
AT-NM1911	Nimbra vision server software license
AT-NM1912	Nimbra vision node software license

* Check with your sales representative for availability

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.

MODEL	DIMENSIONS	WEIGHT
AT-NM1365	44.4cm x 48.2cm x 26cm	15kg
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

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

ONE NETWORK, NO TRANSLATIONS™

The Telesyn carrier-class Ethernet networking solutions are optimised to deliver bundled services to a residential and business subscriber base over native Ethernet fibre and copper interfaces. By providing bundled services over proven native Ethernet switching technology, a service provider can simplify the network architecture, reduce operational costs and increase revenues via new and advanced services. Ethernet is ubiquitous in the LAN sphere and is now breaking open the 'last mile' bottleneck between end-users and high-speed networks. Telesyn Carrier Class Ethernet enables advanced service providers to move away from complex circuit technologies such as ATM and Frame Relay while realising improved profitability with Telesyn's 'One Network and No Translations™' solution.

Telesyn 9000 Series
Multi-service Gigabit Ethernet Platform

Capacity 9700
Service module slots x 17
Control module slot x 2 CFC24, CFC72* (future)
Redundant network modules x 2

Capacity 9400
Service module slots x 7
Control module slot x 1 CFC24, CFC72*
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
* Check with your sales representative for availability

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) 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.

ORDERING INFORMATION

AT-TN253G	9400 Chassis Group with PEM, FAN, MAC
AT-TN253GF	9400 Chassis Group with PEM, FAN, MAC, Filler Plates (6)
AT-TN102-A	Service Module, 10/100T x 10 ports
AT-TN104-A	Service Module, FX10FX, 1310nm, multi-mode, 2km Extended Heat
AT-TN107-A	Service Module, FX10LX, 1310nm, single-mode, 10km, Extended Heat
AT-TN109-A	Service Module, FX10SF, single-mode, 10km, Extended Heat
	Transmit 1550, Receive 1310 (Compatible with Residential Gateway)
AT-TN301-A	WAN Interface card, Gigabit Ethernet x 3 ports

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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

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
- 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 12Mbps ADSL 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	Telesyn 7700 chassis with PEM, FAN, MAC
AT-TN251G	Telesyn 7400 chassis with PEM, FAN, MAC
AT-TN300-A	GE1, 1000X (SFP Based) Network Module
AT-TN400-A	CFC6, 6.4Gbps Control Module
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)*

* Check with your sales representative for availability

MODEL	DIMENSIONS	WEIGHT
Telesyn 9700	44cm x 30cm x 40cm	15kg
Telesyn 9400	44cm x 30cm x 13cm	7kg
Telesyn 7700	44cm x 30cm x 40cm	27.2kg
Telesyn 7400	44cm x 30cm x 13cm	18kg
Telesyn 7100	44cm x 30cm x 4.4cm	4kg

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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.

EXAMPLE: VIRTUAL PRIVATE NETWORK
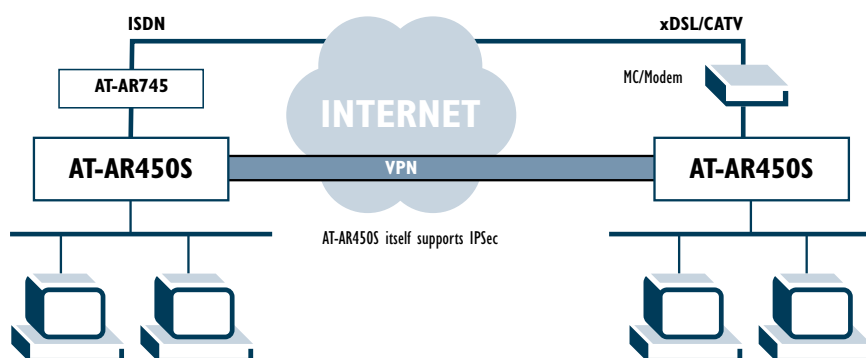
The AT-AR450S can be utilised in broadband services such as FTTH/O, ADSL & CATV by its high performance. For example, a service based on 100M FTTH. The service using PPPoE as its authorisation and provides several global IP addresses so that customers could open their servers to the Internet. Ethernet1 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	28
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	28

MID-RANGE NETWORK ACCESS ROUTER

Multiple Ethernet, VLAN support & choice of WAN interfaces > > >	AT-AR410 > > >	10/100TX x 5 ports Async x 1 port Console x 1 port PIC card x 1 bay	29

BROADBAND CABLE/DSL ROUTERS

Annex A ADSL Modem > > >	AT-AR210 > > >	USB x 1 port ADSL (Annex A) x 1 port (RJ-11)	31
Annex B ADSL Modem > > >	AT-AR215 > > >	USB x 1 port ADSL (Annex B) x 1 port (RJ45)	31
For use with external modem > > >	AT-AR220E > > >	10T x 1 port (RJ45) 10/100TX x 4 ports (RJ45)	31
ADSL router/modem > > >	AT-AR240E > > >	10T x 1 port (RJ45) ADSL (Annex A) x 1 port (RJ-11) USB x 1 port	31
ADSL bridge router > > >	AT-AR250E > > >	10/100TX x 4 ports (RJ45) ADSL (Annex B) x 1 port (RJ-11)	30
	AT-AR255E > > >	10/100TX x 4 ports (RJ45) ADSL (Annex B) x 1 port (RJ-11)	30
	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	30

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	32

SMALL/BRANCH OFFICE SECURITY APPLIANCES

Multiple Ethernet, VLAN support & choice of WAN interfaces > > >	AT-AR410S > > >	10/100TX x 4 ports LAN 10/100TX x 1 port WAN Async x 1 port Console x 1 port PIC card x 1 bay IPSec Accelerator Security Appliance	33
Dual Ethernet with encryption accelerator, > > > Stateful Inspection Firewall & SSH	AT-AR320 > > >	10T x 2 ports Async x 2 ports	33
	AT-AR320S > > >	10T x 2 ports Async x 2 ports IPSec Accelerator	33

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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

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
- External Redundant Power Supply option (AT-RPS740)
- IPv6 optional

TWO YEAR WARRANTY + 1 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

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 41.

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 42.

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MODEL	DIMENSIONS	WEIGHT
AT-AR725	44cm x 33cm x 4.4cm	4.5kg
AT-AR745	44cm x 33cm x 4.4cm	4.8kg

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to protect your network investments well into the future.

AT-AR410
Mid-Range Network Access Router

AT-AR410   10/100TX x 5 ports
Async x 1 port
Console x 1 port
PIC card x 1 bay

Features
- E1, T1, PRI, BRI, Sync, Frame Relay, Leased Line, VoIP, Async option
- Multi-protocol routing including: RIPv1/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 *

TWO YEAR WARRANTY + 1 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

* Check with your sales representative for availability

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 42.

The AT-AR410 software and internal hardware-enabled encryption and compression cards
See Hardware Enabled Encryption and Compression Cards on page 41.

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

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 115kbps)
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

MODEL	DIMENSIONS	WEIGHT
AT-AR410	30cm x 19cm x 4.5cm	1.8kg

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See pgs 56-60 for details

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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 & 1Mbps upstream
- Supports G.lite ADSL up to 1,5 Mbps downstream & 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

TWO YEAR WARRANTY + 1 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

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 & 1Mbps upstream
- Supports G.Lite ADSL up to 1.5Mbps downstream & 512kbps upstream
- Single IPSec, PPTP, L2TP VPN
- 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 + 1 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

MODEL	DIMENSIONS	WEIGHT
AT-AR267	26cm x 18cm x 3.8cm	.5kg
AT-AR250E	17cm x 3.5cm x 11.5cm	.3kg
AT-AR255E	17cm x 3.5cm x 11.5cm	.3kg

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AR200 Series
Broadband Cable/DSL Routers

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 & 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

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 & 1Mbps upstream
- Supports G.Lite ADSL up to 1.5Mbps downstream & 512kbps upstream
- Single IPSec, PPTP, L2TP VPN
- 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 + 1 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

| 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

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-AR240E	17cm x 3.5cm x 11.5cm	.3kg

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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

Features
- Stateful Inspection Firewall
- 511 IPSEC/ISAKMP VPN
- Hardware based AES 3DES DES encryption
- Intrusion Detection & 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

TWO YEAR WARRANTY + 1 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

* Check with your sales representative for availability

IPSEC AUTHENTICATION
- SHA-1
- MD5
- PKI

ROUTING PROTOCOLS
- OSPF
- BGP4 optional
- RIPv1 & RIPv2
- IPv6 optional

MULTICAST PROTOCOL
- DVMRP
- PIM-SM, PIM-DM

ADVANCED TRAFFIC CAPABILITIES
- GRE
- Loadbalancing optional
- IP Multihoming

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.

ICSA labs CERTIFIED www.ICSALabs.com — Firewall

ICSA labs CERTIFIED www.ICSALabs.com — IPSec

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

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

MODEL	DIMENSIONS	WEIGHT
AT-AR450S	26cm x 18cm x 3.8cm	1.7kg

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AT-AR410S
SMB/Branch Office

AT-AR410S

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

The AT-AR410S software and internal hardware-enabled encryption and compression cards
See Hardware Enabled Encryption and Compression Cards on page 41.

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 115kbps)
AT-AR027   2 port VoIP FXS

* Check with your sales representative for availability

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

Features
- 254 VPN (IPSEC/ISAKMP)
- Hardware based DES and 3DES encryption
- Stateful Inspection Firewall
- Attach 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)

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 42.

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

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
- Attach 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 42 AR450S ICSA LAB Certified*)

TWO YEAR WARRANTY + 1 YEAR NET.COVER® BASIC PLUS SUPPORT PROGRAM

MODEL	DIMENSIONS	WEIGHT
AT-AR410	30cm x 19cm x 4.5cm	1.8kg
AT-AR320	26cm x 18cm x 3.8cm	1.7kg

Net.Cover®
Our comprehensive service and support plans designed to protect your network investments well into the future.
See pgs 56-60 for details

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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.

Residential Gateway Products & Components

	Passive Part	AT-RG001	Fibre Outlet (10 pieces)
	Splice Kit	AT-RG010	Fibre Outlet Kit - single-mode Fusion Splice
		AT-RG011	Fibre Outlet Kit - multi-mode Fusion Splice
		AT-RG020	Fibre Outlet Kit - single-mode Mechanical Splice
		AT-RG021	Fibre Outlet Kit - multi-mode Mechanical Splice
	Active Unit	AT-RG613TX	3 x LAN, 2 x FXS, 1 x WAN 10/100TX
		AT-RG613FX	3 x LAN, 2 x FXS, 1 x WAN 10/100 Fibre multi-mode
		AT-RG613LX	3 x LAN, 2 x FXS, 1 x WAN 10/100 Fibre single-mode
		AT-RG623TX	3 x LAN, 2 x BRI, 1 x WAN 10/100TX
		AT-RG623FX	3 x LAN, 2 x BRI, 1 x WAN 10/100 Fibre multi-mode
		AT-RG623LX	3 x LAN, 2 x BRI, 1 x WAN 10/100 Fibre single-mode
	Accessories	AT-RG005	Battery Back Up
		AT-RG006	Battery Back Up Cable
		AT-RGCONSOLECABLE	
	Configuration Software	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

RG600 & RG200 Series
Residential Gateway

AT-RG213
10/100TX or FX x 1 WAN port
10/100TX x 3 Eth. Port
FXS x 2 port
PSTN x 1 line port

AT-RG623
10/100TX or FX/LX x 1 WAN port
10/100TX x 3 Eth. Port
ISDN BRI x 1 port

AT-RG613
10/100TX or FX/LX x 1 WAN port
10/100TX x 3 Eth. Port
FXS x 2 port

Features
- IGMP V1/V2 Multicast support
- Tag based 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 LIMITED WARRANTY

Common features of the RG600 series
- Tagged based VLAN (802.1Q)
- Layer 2 & Layer 3 QoS
- IGMP snooping and proxying
- PPPoE protocol support
- DHCP client, server & relay support
- UpnP IGD profile support & 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)

TWO YEAR LIMITED WARRANTY

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

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

FIBRE APPLICATION
LX (single-mode) version
FX (multi-mode) version

COPPER APPLICATION
TX version

ZTC - HOW IT WORKS

3 - After receiving IP addresses the CPE sends its device ID info to the ZTC server e.g. Firmware version, MAC address etc. via HTTP, TFTP, HTTPS protocol.

2 - DHCP server responds to CPE with IP address and also the IP address of the ZTC Server

4 - Based on device ID info, the ZTC server retrieves unit-specific data from an LDAP server and creates config. file

5 - ZTC server downloads unit specific configuration file and latest firmware to CPE

1 - CPE powers up and looks for a DHCP Server as part of the 'Discover' process

Customer Premises Equipment (CPE) with embedded ZTC Client

MODEL	DIMENSIONS	WEIGHT
AT-RG623	19.8cm x 14.9cm x 4.6cm	.45kg
AT-RG613	19.8cm x 14.9cm x 4.6cm	.45kg
AT-RG213	19.8cm x 14.9cm x 4.6cm	.45kg

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7 Voice over IP

VoIPtalk™

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
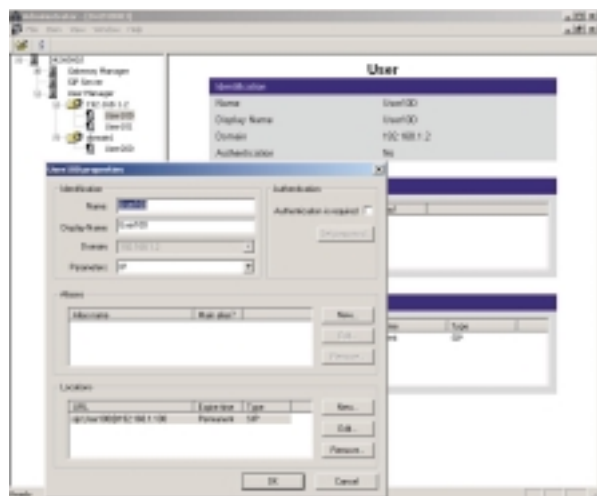
AT-VP500 Unit Network Manager

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

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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

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: 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/NCS
- 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: 802.1Q, DIFFServ support
- Management: SNMPv2, TFTP support

VP600 SOLUTIONS
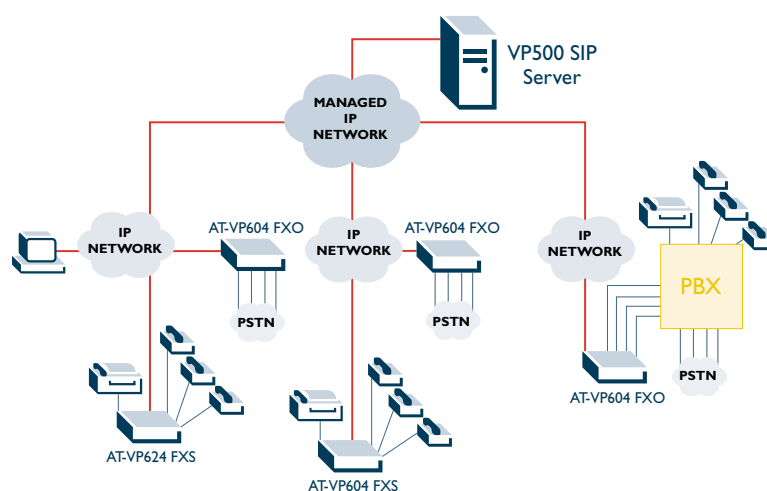
MODEL	DIMENSIONS	WEIGHT
AT-VP604E FXS	26cm x 18cm x 5.5cm	.6kg
AT-VP604E FXO	26cm x 18cm x 5.5cm	.6kg
AT-VP624E FXS	43cm x 21cm x 4.4cm	1.7kg

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support@alliedtelesyn.com

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.

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-RG213
AT-RP24i	AT-8728
AT-RP48	AT-8748
AT-RP48i	TELESYN 7000
AT-RPG6	TELESYN 9000
AT-9812T	
AT-9816GB	
AT-SB4104	
AT-SB4108	

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

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.

AT-View Plus 2.0
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
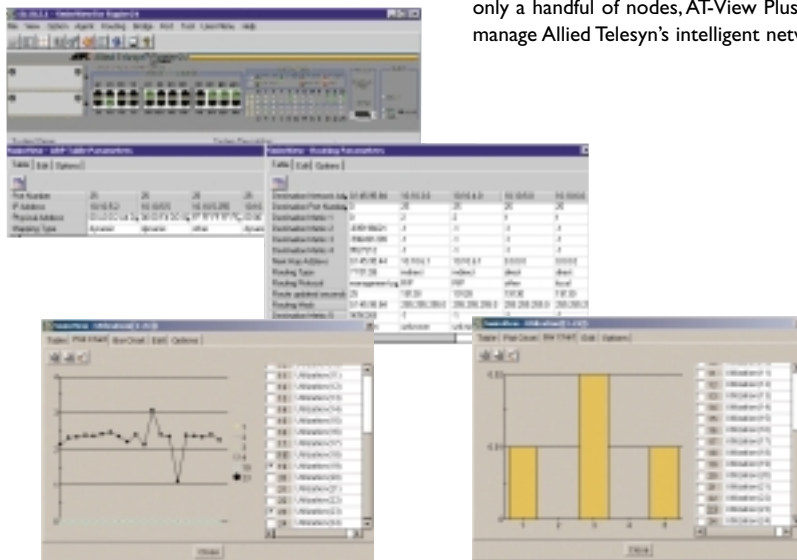
SUPPORTED DEVICES

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-8024
AT-8024FC
AT-8024GB
AT-8024M
AT-8088*
AT-8124
AT-8124XL (V2)
AT-8216FXL/SC
AT-8224XL
AT-8324
AT-8324SX
AT-8326GB
AT-9006SX/SC
AT-9006T
AT-9410GB

LAYER 2/4 SWITCHES
AT-8724XL
AT-8724XL (-48vDC)
AT-8748XL
AT-8748XL (-48vDC)

LAYER 3 SWITCHES
Rapier 16FI/SC
Rapier 16FI/MT
Rapier 24
Rapier 24i
Rapier 48
Rapier 48i
Rapier G6
Rapier G6FLX/SC
Rapier G6FSX/SC
Rapier G6FSX/MT-RJ

LAYER 3/4+ SWITCHES
AT-9812T
AT-9816GB

MANAGEMENT MODULES
AT-BMGMT
AT-MCM02
AT-PBM02
AT-SB4211

MEDIA CONVERTERS
AT-MCF06 Series
AT-MCF12 Series
AT-MCF106 Series
AT-MCF112 Series
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

MODULAR LAYER 3+ SWITCHES
AT-SB4104 (AC)
AT-SB4104 (DC)*
AT-SB4108

NETWORK SERVICE MODULES (NSM)
AT-AR040
AT-AR041
AT-AR042

OPTIONAL FAST ETHERNET EXPANSION MODULES (UPLINK MODULES)
AT-A16
AT-A17
AT-A17
AT-A18
AT-A45
AT-A46
AT-A47

PORT INTERFACE CARDS (PICS)
AT-AR020
AT-AR021S
AT-AR021U
AT-AR022
AT-AR023
AT-AR024
AT-AR026

POWER ACCESSORIES
AT-BRPS8000
AT-PBPWRAC
AT-PWR8000
AT-RPS740
AT-RPS8000

ROUTERS
AT-AR300
AT-AR300L
AT-AR320
AT-AR350
AT-AR370S
AT-AR370U
AT-AR410
AT-AR410 (V2)
AT-AR720
AT-AR725
AT-AR725 (-48vDC)
AT-AR740
AT-AR740 (-48vDC)
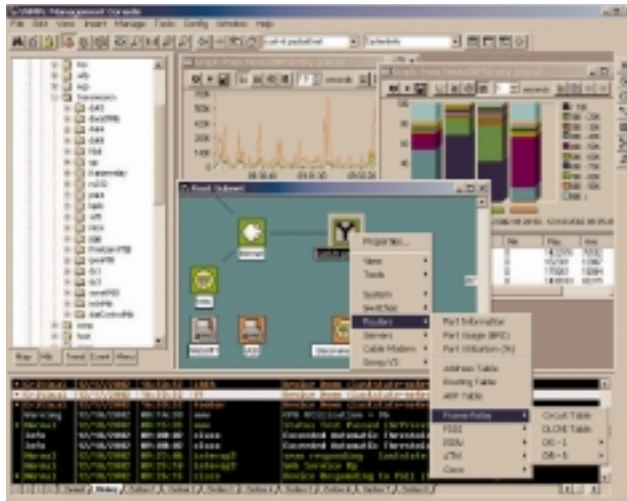AT-AR745
AT-AR745 (-48vDC)

STACKING MODULES
AT-BSTACK1
AT-STACKM

* AT-View Plus 2.1 only

Castle Rock SNMPc 6.0
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-1 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-SS1	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-SS1-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-SS1-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-AR01x & AT-AR06x
Hardware Enabled Encryption and Compression Cards

AT-AR011i	Encryption DES, 3DES & HMAC + Compression Card
AT-AR061	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-AR011i-ECMAC	AT-AR061-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-AR011i-ECMAC	AT-AR061-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-AR011i	AT-AR061
AT-AR3xx	511	
AT-AR4xx	1.024	
AT-AR7xx	1.024	1.024
Rapier 16/24i		2.048

support@alliedtelesyn.com

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	RAPIER i	9800
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 Tunnelling	●	●	●	●	●	
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	●					
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 Tunnelling 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.

AppleTalk — From within the Macintosh desktop environment, AppleTalk provides internetworking for Macintosh computers and other peripheral devices using LocalTalk media.

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.

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).

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:

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.

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.

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.

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.

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:

- 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.

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.

IS-IS — Intermediate-to-Intermediate System is an OSI routing protocol for dynamic routing between intermediate and end network devices.

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.

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	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-ARRPFL3UPGRD	Rapier™ Full Layer 3 Upgrade	**AT-AR300v2SecPk-00**	AR300 series Security Pack Upgrade*
AT-AR9800FL3UPGRD	9800 series Full Layer 3 Upgrade	**AT-AR400sSecPk-00**	AR400 series Security Pack Upgrade
AT-AR400-ADVL3UPGRD	AR400 series Advanced Layer 3 Upgrade	**AT-AR700sSecPk-00**	AR700 series Security Pack Upgrade
AT-AR700-ADVL3UPGRD	AR700 series Advanced Layer 3 Upgrade	**AT-RPSecPk-00**	Rapier™ Layer 3 Switch Security Pack Upgrade
AT-RPADVL3UPGRD	Rapier™ series Advanced Layer 3 Upgrade	**AT-9800SecPk-00**	9800 series Layer 3 Switch Security Pack Upgrade
AT-9800ADVL3UPGRD	9800 series Advanced Layer 3 Upgrade		* only the AR300 V2 can support this option, please check with your sales representative in advance

support@alliedtelesyn.com

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

Secure VPN over Wireless

AT-WL2411

AT-AR410S

Firewall

AT-8326/8350GB Stack

Corporate Main Office

Secure VPN over Wireless

AT-WL2411

AT-AR410S

Firewall

AT-WL2411

AT-AR410S

Firewall

AT-8326/8350GB

Office #1

AT-8326/8350GB
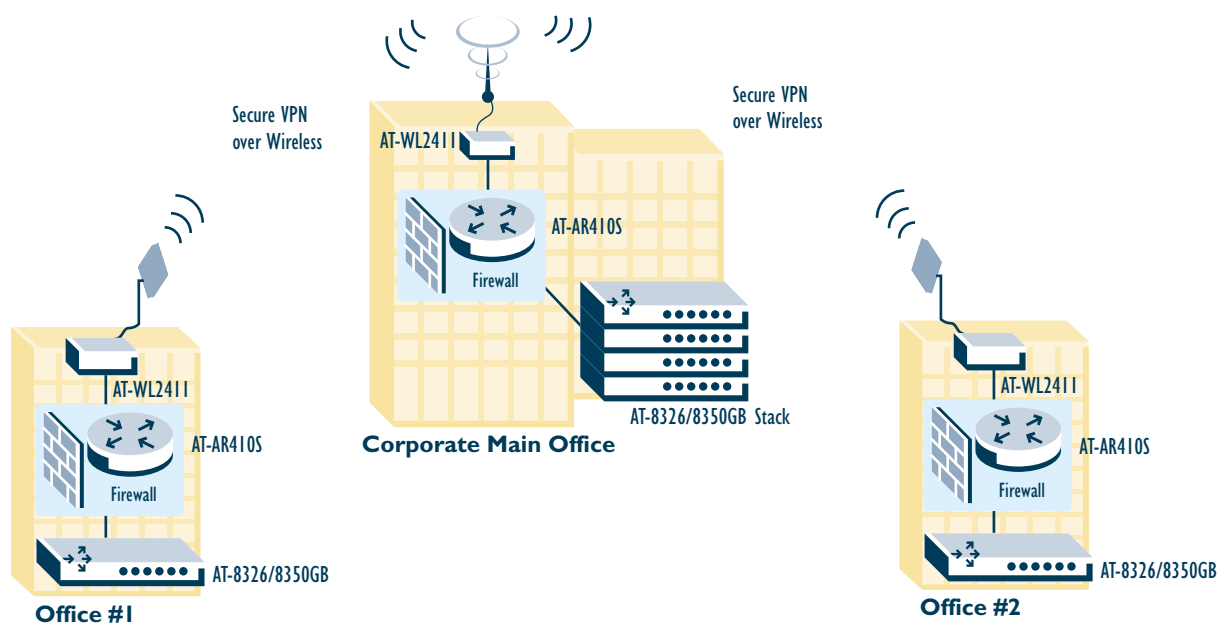
Office #2

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-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
- 802.11a, 802.11b, 802.11g and 802.11i standard support
- IP54 enclosure (AT-WA7501 only)

TWO YEAR WARRANTY

AT-WCL007   PCI adapter wireless client

Features
- 64-bit or 128-bit WEP encryption
- 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

AT-WCL460   USB adapter wireless client

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

TWO YEAR WARRANTY

WiFi COMPLIANT

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MODEL	DIMENSIONS	WEIGHT
AT-WA3404	N/A	N/A
AT-WA7500	25cm x 15.9cm x 3.8cm	.625kg
AT-WCL007	1.3cm x .9cm	.2kg
AT-WCL452	12cm x 5.4cm x .8cm	.25kg
AT-WCL460	10.1cm x 3cm x 1.6cm	.027kg

Wireless Series
Wireless LAN Solutions

AT-WL2411   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

Wireless ETSI compliant Antennas

AT-INT71489   Diversity Antenna 2.4GHz with Radiall 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

Wi Fi ™
COMPLIANT

MODEL	DIMENSIONS	WEIGHT
AT-WL2411	15cm x 9.3cm x 3.5cm	.25kg
AT-WM3400	N/A	N/A

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.

support@alliedtelesyn.com

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	50
1000Mbps fibre multi-mode to single-mode > > >	AT-MC1001	1000SX (SC multi-mode) to 1000LX (SC single-mode)	10km	51
	AT-MC1001SC/GS2	1000SX (SC multi-mode) to 1000LX (SC single-mode)	20km	51
	AT-MC1001SC/GS3	1000SX (SC multi-mode) to 1000LX (SC single-mode)	50km	51
	AT-MC1001SC/GS4	1000SX (SC multi-mode) to 1000LX (SC single-mode)	70km	51
1000Mbps copper to fibre multi-mode > > >	AT-MC1004	1000T to 1000SX (SC multi-mode)	220-550m	51
1000Mbps copper to fibre single-mode > > >	AT-MC1005/1	1000T to 1000LX (SC single-mode)	10km	51
	AT-MC1005/2	1000T to 1000LX (SC single-mode)	20km	51
	AT-MC1005/3	1000T to 1000LX (SC single-mode)	50km	51
	AT-MC1005/4	1000T to 1000LX (SC single-mode)	70km	51

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	51
	AT-MC104LH	100FX (SC multi-mode) to 100FX (SC single-mode longhaul)	40km	51
	AT-MC104SC/FS3	100FX (SC multi-mode) to 100FX (SC single-mode longhaul)	75km	51
	AT-MC104SC/FS4	100FX (SC multi-mode) to 100FX (SC single-mode longhaul)	100km	51
100Mbps copper to fibre multi-mode > > >	AT-MC115XL	10/100TX to 10FL/100SX (ST multi-mode 850nm)	300m	51
	AT-MC116XL	10/100TX to 10FL/100SX (SC multi-mode 850nm)	300m	51
	AT-MC101XL	100TX to 100FX (ST multi-mode)	2km	51
	AT-MC102XL	100TX to 100FX (SC multi-mode)	2km	51
100Mbps copper to fibre single-mode > > >	AT-MC103XL	100TX to 100FX (SC single-mode)	15km	51
	AT-MC103LH	100TX to 100FX (SC single-mode longhaul)	40km	51
	AT-MC103SC/FS3	100TX to 100FX (SC single-mode longhaul)	75km	51
	AT-MC103SC/FS4	100TX to 100FX (SC single-mode longhaul)	100km	51

ETHERNET STANDALONE/RACKMOUNTABLE MEDIA CONVERTERS

10Mbps copper to fibre multi-mode > > >	AT-MC13	10T to 10FL (ST multi-mode)	2km	51
	AT-MC14	10T to 10FL (SC multi-mode)	2km	51
10Mbps copper to copper > > >	AT-MC15	10T to BNC	185m	51

FAST ETHERNET SPEED/MEDIA CONVERTING SWITCHES

100Mbps copper to fibre multi-mode > > >	AT-FS201	10/100TX to 100FX (ST multi-mode)	2km	52
	AT-FS202	10/100TX to 100FX (SC multi-mode)	2km	52
100Mbps copper to fibre single-mode > > >	AT-FS202SC/FS1	10/100TX to 100FX (SC single-mode)	15km	52
	AT-FS202SC/FS2	10/100TX to 100FX (SC single-mode)	40km	52
	AT-FS202SC/FS3	10/100TX to 100FX (SC single-mode)	75km	52
	AT-FS202SC/FS4	10/100TX to 100FX (SC single-mode)	100km	52
100Mbps copper to copper > > >	AT-FS203	10/100TX to 10/100TX	—	52
100Mbps copper to fibre > > >	AT-FS232/FS1	10/100TX to 100FX (SC)	15km	52
	AT-FS232/FS2	10/100TX to 100FX (SC)	40km	52
	AT-FS232/FS3	10/100TX to 100FX (SC)	75km	52
	AT-FS232/FS4	10/100TX to 100FX (SC)	100km	52
100Mbps copper to single fibre > > >	AT-FS237/FS1	10/100TX to 100FX (single-mode)	15km	52
	AT-FS237/FS2	10/100TX to 100FX (single-mode)	40km	52
	AT-FS237/FS3	10/100TX to 100FX (single-mode)	75km	52
	AT-FS237/FS4	10/100TX to 100FX (single-mode)	100km	52
	AT-FS238/FS1	10/100TX to 100FX (single-mode)	15km	52
	AT-FS238/FS2	10/100TX to 100FX (single-mode)	40km	52
	AT-FS238/FS3	10/100TX to 100FX (single-mode)	75km	52
	AT-FS238/FS4	10/100TX to 100FX (single-mode)	100km	52

NOTE - All media converters listed above (excluding AT-EX1002SC/GM1) can be used in the **AT-MCR12**, 12 slot rackmount chassis.   50

FAST ETHERNET WALL-MOUNTED SPEED/MEDIA CONVERTING SWITCHES

100Mbps copper to fibre multi-mode > > >	AT-FS211	10/100TX to 100FX (ST multi-mode)	2km	52
	AT-FS212	10/100TX to 100FX (SC multi-mode)	2km	52
100Mbps copper to fibre single-mode > > >	AT-FS212/1	10/100TX to 100FX (SC single-mode)	15km	52
	AT-FS212/2	10/100TX to 100FX (SC single-mode longhaul)	40km	52
	AT-FS212/3	10/100TX to 100FX (SC single-mode longhaul)	70km	52
	AT-FS212/4	10/100TX to 100FX (SC single-mode longhaul)	90km	52
10/100Mbps copper to 100Mbps fibre multi-mode > > >	AT-FS214	10/100TX to 100FX (MT-RJ multi-mode)	2km	52
	AT-FS215	10/100TX to 100FX (VF-45 multi-mode)	2km	52
	AT-FS216	10/100TX to 100FX (LC multi-mode)	2km	52

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	53
	AT-MCF106/SC	100TX x 6 ports to 100FX x 6 ports (SC multi-mode)	2km	53
	AT-MCF106/VF	100TX x 6 ports to 100FX x 6 ports (VF-45 multi-mode)	2km	53
6 port 100Mbps copper to fibre single-mode > > >	AT-MCF106/SM	100TX x 6 ports to 100FX x 6 ports (SC single-mode)	15km	53
	AT-MCF106/LH	100TX x 6 ports to 100FX x 6 ports (SC single-mode longhaul)	40km	53
12 port 100Mbps copper to fibre multi-mode > > >	AT-MCF112/ST	100TX x 12 ports to 100FX x 12 ports (ST multi-mode)	2km	53
	AT-MCF112/SC	100TX x 12 ports to 100FX x 12 ports (SC multi-mode)	2km	53
	AT-MCF112/VF	100TX x 12 ports to 100FX x 12 ports (VF-45 multi-mode)	2km	53
12 port 100Mbps copper to fibre single-mode > > >	AT-MCF112/SM	100TX x 12 ports to 100FX x 12 ports (SC single-mode)	15km	53
	AT-MCF112/LH	100TX x 12 ports to 100FX x 12 ports (SC single-mode longhaul)	40km	53

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	53
	AT-MCF06/SC	10T x 6 ports to 10FL x 6 ports (SC multi-mode)	2km	53
6 port 10Mbps copper to fibre single-mode > > >	AT-MCF06/SM	10T x 6 ports to 10FL x 6 ports (ST single-mode)	15km	53
12 port 10Mbps copper to fibre multi-mode > > >	AT-MCF12/ST	10T x 12 ports to 10FL x 12 ports (ST multi-mode)	2km	53
	AT-MCF12/SC	10T x 12 ports to 10FL x 12 ports (SC multi-mode)	2km	53
12 port 10Mbps copper to fibre single-mode > > >	AT-MCF12/SM	10T x 12 ports to 10FL x 12 ports (ST single-mode)	15km	53

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	50
	AT-PB1001/2	1000SX (SC multi-mode) to 1000LX (SC single-mode)	20km	50
	AT-PB1001/3	1000SX (SC multi-mode) to 1000LX (SC single-mode)	50km	50
	AT-PB1001/4	1000SX (SC multi-mode) to 1000LX (SC single-mode)	70km	50
1000Mbps copper to fibre GBIC > > >	AT-PB1005G	1000T to 1000SX/LX GBIC	220m - 70km	50

FAST ETHERNET MEDIA CONVERSION BLADES

100Mbps copper to fibre multi-mode > > >	AT-PB101	100TX to 100FX (ST multi-mode)	2km	50
	AT-PB102	100TX to 100FX (SC multi-mode)	2km	50
	AT-PB301	100TX to 100FX (VF-45 multi-mode)	2km	50
	AT-PB302	100TX to 100FX (MT-RJ multi-mode)	2km	50
100Mbps copper to fibre single-mode > > >	AT-PB103/1	100TX to 100FX (SC single-mode)	15km	50
	AT-PB103/2	100TX to 100FX (SC single-mode longhaul)	40km	50
	AT-PB103/3	100TX to 100FX (SC single-mode longhaul)	75km	50
	AT-PB103/4	100TX to 100FX (SC single-mode longhaul)	100km	50

ETHERNET MEDIA CONVERSION BLADES

10Mbps copper to fibre multi-mode > > >	AT-PB13	10T to 10FL (ST multi-mode)	2km	50
	AT-PB14	10T to 10FL (SC multi-mode)	2km	50
10Mbps copper to copper > > >	AT-PB15	10T to BNC	185m	50

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	50
	AT-PB202	10/100TX to 100FX (SC multi-mode)	2km	50
	AT-PB204	10/100TX to 100FX (MT-RJ multi-mode)	2km	50
	AT-PB205	10/100TX to 100FX (VJ-45 multi-mode)	2km	50
10/100Mbps copper to 100Mbps fibre single-mode > > >	AT-PB202/1	10/100TX to 100FX (SC single-mode)	15km	50
	AT-PB202/2	10/100TX to 100FX (SC single-mode)	40km	50
	AT-PB202/3	10/100TX to 100FX (SC single-mode)	70km	50
	AT-PB202/4	10/100TX to 100FX (SC single-mode)	90km	50

NOTE - The media conversion blades listed above are designed to be used with/in the **AT-PBC18**, manageable rackmount chassis.   50

powerBLADE

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-G8TP	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

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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   Two years on PSU

Redundant power module for the AT-MCR12

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

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

MODEL	DIMENSIONS	WEIGHT
AT-PBC18 chassis	44cm x 47cm x 11cm	9.1kg
Blades	20cm x 10cm x 2.3cm	.14kg
AT-MCR12	44cm x 22cm x 13cm	9.5kg
EX1000 series	20cm x 16cm x 3.8cm	1.3kg

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

Common features of the MC1000 series
- Support for multi-mode and single-mode fibre full-duplex
- Fits the AT-MCR12 rackmount chassis

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

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 Two years on PSU

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 Two years on PSU

MODEL	DIMENSIONS	WEIGHT
MC1000 series	10cm x 9.5cm x 2.5cm	.3kg
MC100 series	10cm x 9.5cm x 2.5cm	.3kg
MC10 series	10cm x 9.5cm x 2.5cm	.3kg

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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
AT-FS237/FS2	10/100TX to 100FX (single-mode)	40km
AT-FS237/FS3	10/100TX to 100FX (single-mode)	75km
AT-FS237/FS4	10/100TX to 100FX (single-mode)	100km
	1310 nm TX/RX	
AT-FS238/FS1	10/100TX to 100FX (single-mode)	15km
AT-FS238/FS2	10/100TX to 100FX (single-mode)	40km
AT-FS238/FS3	10/100TX to 100FX (single-mode)	75km
AT-FS238/FS4	10/100TX to 100FX (single-mode)	100km
	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
- 8,000 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 Two years on PSU

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 Two years on PSU

MODEL	DIMENSIONS	WEIGHT
FS200 series	10cm x 9.5cm x 2.5cm	.3kg
FS230 series	10.5cm x 9.5cm x 2.5cm	.3kg
FS210 series	9cm x 7cm x 2.2cm	.3kg

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

TWO YEAR 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-MCF06/SM	10T x 6 ports to 10FL x 6 ports (ST single-mode)	15km
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
AT-MCF12/SM	10T x 12 ports to 10FL x 12 ports (ST single-mode)	15km

Common features of the MCF10 series

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

TWO YEAR 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

MODEL	DIMENSIONS	WEIGHT
MCF100 series	44cm x 24cm x 4.4cm	3.5kg
MCF series	44cm x 24cm x 4.4cm	3.5kg

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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.

1000Mbps

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 2970 series
- Traffic and troubleshooting LEDs
- Support for all popular operating systems
- 32/64-bit bus
- 33/66MHz operation
- Fully 802.3z compliant
- PXE 2.0 support

`LIFETIME WARRANTY`
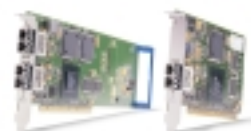
AT-2930SX V2   1000SX x 1 port (SC)
AT-2930TV2   1000T x 1 port (RJ45)

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 802.3z compliant
- 10/100/1000T auto-negotiation (AT-2930T only)

`LIFETIME WARRANTY`

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 802.3z compliant
- 10/100/1000T auto-negotiation

`LIFETIME WARRANTY`

MODEL	DIMENSIONS	WEIGHT
AT-2971SX/SC	19cm x 13cm	.32kg
AT-2971T	19cm x 13cm	.32kg
2930 V2 series	17cm x 9.5cm	.27kg
AT-2915T	14cm x 6.3cm	.2kg

AT-2800TX
Fast Ethernet CardBus PCI Adapter

AT-2800TX   10/100TX

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

LIFETIME WARRANTY

2700 Series
Fast Ethernet PCI Adapters

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

AT-2746FX/ST   10FL (ST) & 100FX
AT-2746FX/SC   10FL (SC) & 100FX

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

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-2700FTX models only)

LIFETIME WARRANTY

AT-2501TX & AT-2451FTX
Fast Ethernet PCI Adapters

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

AT-2501TX model available in NEW LOW PROFILE design

AT-2451FTX model available in NEW LOW PROFILE design

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

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
2700 series	15cm x 11cm	.12kg
AT-2800TX	8.5cm x 5.5cm	.18kg
AT-2450FTX	15cm x 11cm	.12kg
AT-2501TX	13cm x 12cm	.18kg
AT-2400BT	13cm x 12cm	.18kg

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Service & Support Programs

Net.Cover®

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

Austria, Belgium, France, Germany, Ireland, Italy, Luxembourg, The Netherlands, Norway, Sweden, Switzerland, United Kingdom
Freephone: 00 800 287 877 678 or +31 20 711 4333
Support E-mail Address: europe_support@alliedtelesyn.com

Bosnia & Herzegovina, Bulgaria, Serbia & Montenegro, Macedonia
Support Telephone number: +381-11-3235-639
Support Fax Number: +381-11-3235-992
Support E-mail Address: Yug.Servis@alliedtelesyn.com

All other countries not listed should refer their technical support requests to:
Support Telephone number: 31 20 711 4333
Support E-mail Address: europe_support@alliedtelesyn.com

Croatia
Support Telephone number: +385 1 382 1341
Support Fax Number: +385 1 382 1340
Support E-mail Address: ATIhelpdesk_Croatia@alliedtelesyn.com

Czech Republic
Support Telephone number: +420 296 538 888
Support Fax Number: +420 296 538 889
Support E-mail Address: Czech_support@alliedtelesyn.com

Finland
Freephone: 990 800 287 877 67 or +31 20 711 4333
Support E-mail Address: europe_support@alliedtelesyn.com

Hungary
Support Telephone number: +36 1 382 6385
Support Fax number: +36 1 382 6398
Support E-mail Address: Hungary_Helpdesk@alliedtelesyn.com

Poland
Support Telephone number: +48 22 535 9670
Support Fax number: +48 22 535 9671
Support E-mail Address: Polska_pomoc@alliedtelesyn.com

Russia & former Soviet Union Countries
Support Telephone number: +7-095-935 8585
Support Fax number: +7-095-935 8586
Support E-mail Address: support_CIS@alliedtelesyn.ru

Spain
Freephone: 00 800 287 877 67 or +31 20 711 4333
Support E-mail Address: europe_support@alliedtelesyn.com

Ukraine
Support Telephone number: +7-095-935 8585
Support Fax number: +7-095-935 8586
Support E-mail Address: Ukraine_support@alliedtelesyn.ru

Net.Cover®
Service & Support Programs

At Allied Telesyn, we realise that many customers want to take additional precautions to safeguard the integrity of networked data, ensure network uptime and maximise end-user productivity. That's why we've introduced Net.Cover®. This flexible set of service and support programs can be tailored to meet the needs of a wide range of customers: Internet service providers, Web content providers, multi-tenant building service providers, e-businesses, metropolitan area networks, hosting, co-location centres and enterprise businesses. Net.Cover® programs can be purchased over a one or three year term and are renewed thereafter on an annual basis.

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 — The Net.Cover® Basic support plan is designed for customers who are interested in keeping service and support costs to a minimum but want access to basic support services. Basic service includes access to Allied Telesyn's web-accessible knowledge database, software updates and bug fixes and advance replacement of failed hardware.	●	●		●	●	Shipped within 5 Business Days *		
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 (24x7)	●	
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

* Business day is defined as Monday to Friday excluding statutory national holidays

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All Allied Telesyn products carry at least a two 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.com/netcover

- 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 OPTIONS
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.com/netcover

TRAINING PROGRAMS
- Product training
- Certification training
- Technology training
- Train-the-Trainer
For more info Europe and U.S. :
http://www.alliedtelesyn.com/training

ATI On-line Solutions (AOS) (Basic, 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, 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, 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. Customers can access TAC via phone, Europe 00800-28-7877678 or +31-20-711-4333.

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 (AR1) (Basic)
In the unlikely event of a hardware failure, AR1 provides a hardware replacement that will ship within 5 business days from the issuing of an RMA number. AR1 is accessible through the TAC.

Advance Replacement Services (AR2) (Basic Plus)
In the unlikely event of a hardware failure, Net.Cover® AR2 guarantees the same *business day shipment of a replacement unit, or next *business day shipment if the request is received after 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.

Net.Cover®
Benefits

Available Services	ATI Standard		Basic	Basic Plus†	Silver	Gold	Platinum	SSSP ❶	GSSP ❷
	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									●

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(1) Next Business Day   * Business hours   ◊ First year only
† As standard on Managed Switches & Routers
❶ SSSP (Silver Software Support Program)
❷ GSSP (Gold Software Support Program)

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

support@alliedtelesyn.com

Net.Cover®
Training Services

Training
Partner
Net.Cover®

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)
3. 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 Allied Telesyn products. 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 emphasizes on how to pass CAI and CASE 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.com/training or call your local Allied Telesyn office today

e-learning Wireless

The Wireless e-learning training is composed of a series of information modules followed by a final examination. The course is specially designed for e-learning, featuring audio, animations, additional documents and links to useful web sites.

For more information, please visit www.alliedtelesyn.com/elearning

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SOHO & Consumer Connectivity with Corega

Corega is a wholly owned Allied Telesyn company focused on providing cost-effective product solutions for consumers in the SOHO market. Corega have an award winning range of Ethernet and WiFi Wireless Networking, USB Connectivity, Flash Memory and Peripheral Sharing Devices.

Layer 2 Unmanaged Gigabit Ethernet Switches

COR-GSW-4P 10/100/1000T x 4 ports, External PSU
COR-GSW-8 10/100/1000T x 8 ports, Internal PSU

Features
- Non-blocking
- Wirespeed forwarding
- Metal chassis

TWO YEAR WARRANTY

Layer 2 Unmanaged Fast Ethernet Switches

	PORTS	PSU	CHASSIS	UPLINK	ALL PORTS	MOUNTING
COR-FSW-5PM	10/100TX x 5 ports	External PSU	Plastic	Uplink port		
COR-FSW-5PA	10/100TX x 5 ports	External PSU	Plastic		Auto MDI/MDI-X	
COR-FSW-8PM	10/100TX x 8 ports	External PSU	Plastic	Uplink port		
COR-FSW-8PA	10/100TX x 8 ports	External PSU	Plastic		Auto MDI/MDI-X	
COR-FSW-8MA	10/100TX x 8 ports	Internal PSU	Metal		Auto MDI/MDI-X	Rackmountable
COR-FSW-16PM	10/100TX x 16 ports	External PSU	Plastic	Uplink port		
COR-FSW-16A	10/100TX x 16 ports	Internal PSU	Metal		Auto MDI/MDI-X	Rackmountable
COR-FSW-24	10/100TX x 24 ports	Internal PSU	Metal			Rackmountable

Layer 2 Managed Fast Ethernet Switches

COR-MSW-24 10/100TX x 24 ports
COR-MSW-2402T 10/100TX x 24 ports
10/100/1000T x 8 ports

Features
- 9.6Gbps switch fabric
- 32 VLAN support
- Non-blocking
- Wirespeed forwarding
- Web based management and SNMP
- IEEE 802.1Q VLAN tagging
- IEEE 802.1p Class of Service
- Pre-programmed IP address for easy setup

TWO YEAR WARRANTY

For more details on Corega, and the Corega product set — including a range of Ethernet Hubs, Switches and Adapters, visit the Corega Website at

WWW.COREGA-INTERNATIONAL.COM

Layer 1 Media Converters

COR-MC10-ST 10T to 10FL (ST)
COR-MC100-ST 10T to 100FT (ST)
COR-MC100-SC 10T to 100FT (SC)

Features
- Connect networks up to 2km apart

TWO YEAR WARRANTY

Layer 1 Unmanaged Ethernet Hubs

COR-HUB-5 10T x 5 ports
COR-HUB-8 10T x 8 ports

Features
- Cascade/uplink port
- External Power Adapter
- Plastic Chassis

TWO YEAR WARRANTY

PCI Adapter Cards

COR-PCI-TX	10/100TX
COR-PCI-T32	10/100/1000T
COR-WLPCIB-11	IEEE 802.11b Adapter

Features
- Wake On LAN support
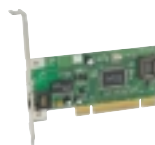
PCMCIA Adapter Cards

COR-PCC-TXD	10/100TX, PCMCIA type 1
COR-PCCL-11	Wireless IEEE 802.11b, PCMCIA type II
COR-WLCB-54GT	Wireless IEEE 802.11g PCMCIA type II (CardBus)

Features
- Support for WinXP, 2000, ME, 98
- Integral RJ45 on COR-PCC-TXD
- Integral Antennas on Wireless adapters

USB Adapters

COR-USB-TXS	10/100TX USB1.1 Adapter
COR-USB2-TX	10/100TX USB2.0 Adapter
COR-USB-Stick-11	IEEE 802.11b USB1.1 'Pen-style' Adapter
COR-USB-11-Mini	IEEE 802.11b USB1.1 'Desktop' Adapter

USB Pocket Flash Drives

COR-UPFD-32	32MB
COR-UPFD-64	62MB
COR-UPFD-128	128MB

Features
- USB1.1 Compliant Memory device
- High-speed date read and write
- Write protect switch
- No drivers needed for most operating systems

IEEE 802.11g & IEEE802.11b 11Mbps Wireless

WLAR-54GT	802.11g Access Point
COR-APL-11	Access Point
COR-BAR-WL	Broadband Access Router

Keyboard, Video, Mouse (KVM) Switches

COR-KVM-Mini-18	Switch x 2 ports, with integral cables
COR-KVM-2	Switch x 2 ports, ships with 2 cables
COR-KVM-4	Switch x 4 ports, ships with 4 cables
COR-KVM-8pro	Switch x 8 ports

Features
- Supports video resolutions up to 1920 x 1440 dots
- Supports PS/2 style mouse connections
- Supports PS/2 style keyboard connections
- Soft key (keyboard command) switching support

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