



AT-A45/XX, AT-A46, AT-A47 & AT-STACKM Expansion Modules for AT-8000, AT-8500 and AT-8600 Series Switches

AT-A45/SC

Single port 100FX module w/SC connectors

AT-A45/MT

Single port 100FX module w/MT connectors

AT-A45/SC-SM15

100BaseFX singlemode module, 15km

AT-A46

Single-port 10/100/1000T module

AT-A47

Unpopulated GBIC module

AT-STACKM

Stacking kit

AT-A45/xx Series Expansion Module

The AT-A45/xx series of expansion modules provide optional uplink ports for AT-8000 Series, AT-8500 Series and AT-8600 series Fast Ethernet switches. Hot-swappable, they plug into the expansion slot(s) on the front of the switches without having to power OFF the switch. Their modularity offers flexibility in building or expanding your network. A maximum of two expansion modules can be installed in a switch, depending on the number of slots on the model.

The AT-A45/SC-SM15 singlemode transceiver is a high-performance module for bi-directional serial optical data communications, operating at a nominal wavelength of 1310nm. The transmitter section uses a multiple quantum well laser and is class 1 laser-compliant according to international Safety Standard IEC-825. The receiver section uses a planar InGaAs PIN photodiode for low dark current and excellent responsivity.

The AT-A45/SC and AT-A45/MT multimode transceivers are ideal for the 2km multimode fiber backbone. The transmitter section utilizes 1300nm Surface Emitting InGaAsP LEDs.

AT-STACKM Expansion Module

The optional AT-STACKM module provides a Gigabit Ethernet connection between compatible AT-8000 Series Fast Ethernet switches for improved network performance. The AT-STACKM modules can be installed without powering off the switches. A maximum of two stack modules can be installed in a switch.

Note: The GBIC module for the AT-A47 expansion module is sold separately. Refer to the GBIC module Installation Guide or contact your Allied Telesis sales representative for additional information on available GBIC modules.

Key Features

- Fully compliant with 100 base-FX/IEEE 802.3u optical performance requirements
- Industry-standard 1 x 9 Footprint
- Wave solder compatible
- Aqueous wash process compatible
- Manufactured in an ISO 9002 certified facility

Expansion Modules

Expansion Module	Port Type	Connector Type	Cable Type	Max. Cable Length
AT-A45/SC	100base-FX	SC	50/125 or 62.5/125 μ m multimode fiber	Half-Duplex: 412m (1,360ft) Full-duplex: 2km (6600 ft)
AT-A45/MT	100Base-FX	MT-RJ	50/125 or 62.5/125 μ m multimode fiber	Half-Duplex: 412m (1,360ft) Full-duplex: 2km (6600 ft)
AT-A45/SC-SM15	100Base-FX	SC	9/125 μ m singlemode fiber	15 km (9.3mi)
AT-A46	10/100/1000T	RJ-45	10base-T: CAT 3 or better; 100/1000Base-T: CAT 5 or better	100m (328 ft)
AT-A47	1000Base-X	Varies by GBIC module	Varies by GBIC module	Varies by GBIC module
AT-STACKM	N/A	N/A	Hyper Speed Serial Data Cable (HSSDC)	.5 meter

Port Specification

AT-A45/xx

The information below provides port specifications for the AT-A45/xx expansion modules

Pin Signal

Operating Wavelength: 1310nm
 Transmitter output power: 50/125 μm cabling
 Min:-22.5 dBm avg.
 Max: -14 dBm avg.

62.5/125 μm cabling

Min: -19 dBm avg.
 Max: -14 dBm avg.
 Receiver Sensitivity Max: -14 dBm avg.

Optical Characteristics

AT-A45/SC and AT-A45/MT

Transmitter

Parameter	Min.	Typ.	Max	Unit
Optical Extinction Ratio	--	0.05	0.2	%
Center Wavelength	1270	1308	1380	nm
Spectral Width—RMS	--	63	--	nm
Optical Rise Time	0.6	1.9	3.0	ns
Optical Fall Time	0.6	1.6	3.0	ns

Receiver

Parameter	Min.	Typ.	Max	Unit
Sensitivity	--	--	-31	dBm
Operating Wavelength	1270	--	1380	nm

AT-A45/SC-SM15

Transmitter

Parameter	Min.	Typ.	Max	Unit
Optical Extinction Ratio	8.2	--	--	dB
Center Wavelength	1261	1310	1360	nm
Spectral Width—RMS	--	--	7.7	nm
Optical Rise Time	--	--	2.0	ns
Optical Fall Time	--	--	2.0	ns

Receiver

Parameter	Min.	Typ.	Max	Unit
Sensitivity	--	--	-34	dBm
Operating Wavelength	1100	--	1600	nm

Technical Specifications

AT-STACKM - Package Content

- Two AT-STACKM Stack Modules
- One HSSDC Cable
- Installation Guide
- Warranty Card

Software Configuration:

The AT-STACKM module is activated as soon as it is installed in a switch. There are no special software configuration steps to perform. The speed of the port cannot be changed and is set at 1000Mbps. However the port can be enabled or disabled and the port can be assigned to different virtual LANs (VLANs), just as any switch port can be.

Miscellaneous Specifications

Supported Modules

AT-A45/MT	8024M, 8016F/MT, 8016F/SC, 8088, 8012M, 8012M/QS, 8524M, 8516FC
AT-A45/SC	8024M, 8016F/MT, 8016F/SC, 8088, 8012M, 8012M/QS, 8524M, 8516FC, 8624
AT-A45/SC-SM15	8024M, 8016F/MT, 8016F/SC, 8088, 8012M, 8012M/QS, 8524M, 8516FC, 8624
AT-A46	8024M, 8016F/MT, 8016F/SC, 8088, 8012M, 8012M/QS, 8524M, 8516FC, 8624
AT-A47	8024M, 8016F/MT, 8016F/SC, 8088, 8012M, 8012M/QS, 8524M, 8516FC, 8624
AT-STACKM	8024M, 8016F/MT, 8016F/SC, 8516F/SC, 8524M, 8524POE

Environmental Specifications

Operating Temp: 0°C to 40°C (32°F to 104°F)
 Storage Temp: -20°C to 80°C (-4°F to 176°F)

Relative Humidity operating and Storage:
 5% to 80% non-condensing

Operating and Storage Altitude:
 Up to 3,048 meters (10,000 feet)

Electrical/Mechanical Approvals

Safety: UL 1950 (UL/cUL), EN60950 (TUV); EN60825
 EMC FCC Class A, EN55022 Class A, EN55024, VCCI class A
 Immunity: EN50082-1

Warranty

5 Years

Country of Origin

Taiwan, China

Ordering Information

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AT-45/MT

Single port 100FX module with MT connectors

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