

AMC-1

Miniature Media Converter



FEATURES

- Miniature modular media converter, operating over fiber optic, UTP, STP and coax lines
- Provides transparent conversion at the data rates of up to 155 Mbps
- Supports the following protocols:
 - ATM/SDH/SONET
 - Ethernet
 - Token Ring
- Complies with ATM Forum and ITU-T G.957 and G.958 specifications
- Supports hot-swappable, electrical and fiber optic modules, including long-haul and WDM interfaces. The modules are compatible with RAD's AMC-101, universal media converter and repeater.
- Compact, lightweight, easy to install
- Operates with an external power supply

DESCRIPTION

- AMC-1, miniature modular media converter, provides transparent conversion of optical and electrical signals for ATM, SDH/SONET, Ethernet and Token Ring at data rates of up to 155 Mbps.
- AMC-1 provides transparent media conversion for the following protocols over optical and copper cables:
 - 51 Mbps OC-1
 - 100 Mbps TAXI
 - 155 Mbps OC-3/STM-1
 - 155 Mbps STS-3c over UTP/STP
 - 155 Mbps STS-3c/STM-1 over coax
 - Ethernet
 - Token Ring.
- AMC-1 supports transparent modules, which provide cost-effective conversion for applications that do not require repeating or reclocking.
- A long-haul fiber optic option is available to provide increased range of up to 110 km (68 miles).
- The SF1 and SF2 modules allow AMC-1 to operate over single strand fiber optic cables, using WDM technology.
- AMC-1 is a compact, lightweight, easy-to-install unit, which operates with external DC power supply.

SPECIFICATIONS

- **Interface Modules**
See Table 1 and Table 2
- **Data Rate**
Up to 155 Mbps
- **Indicators**
PWR – Unit is powered up
SIG – ON when valid signal is received
- **Power**
External power supply, 5 VDC
1.2A regulated (+10%, -2% VDC)
- **Physical**
Height: 10.6 cm / 4.2 in
Width: 8.7 cm / 3.4 in
Depth: 6.2 cm / 2.4 in
Weight 330g / 11.6 oz
- **Environment**
Temperature: 0–40°C/32–104°F
Humidity: Up to 90%, non-condensing

AMC-1

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ORDERING

AMC-1/&/#

Miniature media converter

& Specify module type:

Refer to Table 1 and Table 2 for the module name

Specify second module type:

Refer to Table 1 and Table 2 for the module name

Table 1. Fiber Optic Interface Modules

Module Name	Transmitter Type	Protocols Supported	Connector Type	Fiber Type	Wavelength	Typical Optical Power	Receiver Sensitivity	Typical Range According to Data Rates [km/miles]		
								51 Mbps	100 Mbps	155 Mbps
MO1	LED	All	SC	62.5/125, multimode	1310 nm	-18 dBm	-31 dBm	4/2.4	2/1.2	2/1.2
MO2	LED	All	ST	62.5/125, multimode	1310 nm	-18 dBm	-31 dBm	2/1.2	2/1.2	2/1.2
MO3	LED	Token Ring, Ethernet	ST	62.5/125, multimode	850 nm	-18 dBm	-30 dBm	2/1.2	2/1.2	2/1.2
MO4	LED	All	ST	9/125, single mode	1310 nm	-15 dBm	-31 dBm	25/15.5	25/15.5	20/12.4
MO5	Laser	All	ST	9/125, single mode	1310 nm	-12 dBm	-31 dBm	40/25	25/15.5	20/12.4
MO6	LED	All	FC	9/125, single mode	1310 nm	-15 dBm	-31 dBm	25/15.5	25/15.5	20/12.4
MO7	Laser	All	FC	9/125, single mode	1310 nm	-12 dBm	-31 dBm	40/25	25/15.5	20/12.4
MO8	Laser	All	SC	9/125, single mode	1310 nm	-12 dBm	-31 dBm	40/25	25/15.5	20/12.4
MO9	Laser	All	ST	9/125, single mode	1550 nm	-12 dBm	-31 dBm	50/31	25/15.5	20/12.4
MO10	Laser (SF1, WDM)	All	FC	9/125, single mode	Tx – 1310 nm Rx – 1550 nm	-12 dBm	-29 dBm	35/21.7	25/15.5	20/12.4
MO11	Laser (SF2, WDM)	All	FC	9/125, single mode	Tx – 1550 nm Rx – 1310 nm	-12 dBm	-29 dBm	35/21.7	25/15.5	20/12.4
MO12	Laser (SF1, WDM)	All	ST	9/125, single mode	Tx – 1310 nm Rx – 1550 nm	-12 dBm	-29 dBm	35/21.7	25/15.5	20/12.4
MO13	Laser (SF2, WDM)	All	ST	9/125, single mode	Tx – 1550 nm Rx – 1310 nm	-12 dBm	-29 dBm	35/21.7	25/15.5	20/12.4

Table 2. Electrical Interface Modules

Module Name	Protocols Supported	Operation Mode	Cable Type	Connector Type	Impedance [Ω]	Typical Range [m/feet]
ME6	STS-3C	–	UTP, Cat 5	Shielded RJ-45	100	50/164
ME7	STS-3C	–	STP Type 1	DB-9	150	50/164
ME10	Ethernet	Ethernet bridge	UTP, Cat 5	Shielded RJ-45	100	100/328

Note: The ME10 modules require AMC-1 units installed at the local and remote site of the application.

APPLICATION

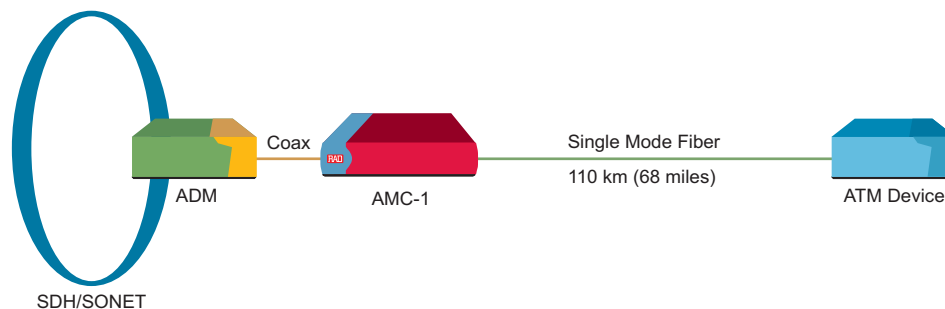


Figure 1. AMC-1 Operating as Media Converter



data communications

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