

FIBERROAD

Managed Media Converter

Product Data Sheet



Managed Fiber Media Converter

The Managed Media Converter is an IEEE 802.3ah compliant copper to fiber Ethernet solution designed to make conversion between Fast Ethernet and Gigabit Ethernet with SFP/1x9 Optical modules. With SNMP and Web-based management in the standalone type or play as remote unit communicate with FR6016 Platform to realize centralized management. The administrator can monitor, configure and control the activity of each unit and remotely connected OAM compliant converter. Converter settings include bandwidth control, duplex, and speed configuration, VLAN tagging, limited Q-in-Q support and SFP DDMI. When used as stand-alone converters, the FR-6103/R can be managed by a friendly Web Smart user interface via any web browser.

Main Features

- Support Fast Ethernet or Gigabit Ethernet
- Auto-Cross over for MDI/MDIX in TP port
- Auto-Negotiation or manual mode in TP port
- Supports flow control Enable or Disable
- Supports Jumbo Frame 16K Packet
- Ingress/Egress bandwidth control
- Supports in-band IEEE802.3ah management
- Firmware upgrade via Web (Centralized Management Only)
- Dying gasp(Remote power failure detection on standalone)
- Supports Link Fault Pass-Through(LFPT)Function
- Support Auto Laser Shutdown(ALS) Function(Centralized Management Only)
- Support SNMP, Web Management



Product Specifications

Ethernet Interface				
Model	FR-6101/R	FR-6102/R	FR-6103/R	FR-6104/R
Ports	1x10/100Base-T RJ45 ports, 1x100Base-X SFP/SC	2x10/100Base-T RJ45 ports, 1X100Base-X SFP/SC	1x10/100/1000Base-T RJ45 ports, 1x1000Base-X SFP/SC	2x10/100/1000Base-T RJ45 ports, 1x1000Base-X SFP/SC
Port Mode(Tx)	Auto Negotiation Speed Full/Half Duplex Mode Auto MDI/MDI-X Connection			
Standards	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) and 100BaseFX IEEE 802.3ab for 1000BaseT(X) IEEE 802.3z for 1000BaseSX/LX/LHX/ZX IEEE 802.3x for flow control			
Maximum Packet Length	2046 Bytes	2046 Bytes	2046 Bytes	2046 Bytes
Forward Filter Rate	14,880pps(10Mbps) 148,800pps(100Mbps) 1,488,000pps(1000Mbps)			
Transmission Mode	Store and Forward (full/half duplex mode) Cut-Through			
Transmission Distance				
Optical Fiber Port	Depends on optical module(0-160km)			
RJ45 Port Transmission Distance	100m (using standard CAT5/CAT5e cable)			
Physical Characteristics				
Housing	Metal Case			
IP Rating	IP30			
Dimensions	156mm x 128mm x 32mm (L x W x H) (Standalone Case) 120mm x 90mm x 22mm (L x W x H) (Card)			
Installation	Desktop			
Weight	350g(Standalone) 150g(Card)			
Environmental				
Operating Temperature	0°C~50°C (-40 to 167 °F)			
Operating Humidity	5%~90% (non-condensing)			
Storage Temperature	-25°C~70°C (-40 to 185 °F)			
Heat Dissipation	34 BTU/h			
Cooling	Passive Cooling, Fanless Design			
Noise Level	0 dBA			
Power Supply				
Power Input	100-240 VAC,1A or DC48V (Standalone)			
Power Input	5V 1.5A (Card)			

Product Specifications

LED	State	Description
DUP	ON	Full Duplex
	OFF	Half Duplex
1000M	ON	1000M Running
	OFF	100M or 10M Running
100M	ON	100M Running
	OFF	1000M or 10M Running
TPLINK	ON	TX Link Connected
	Flash	TX Signal Transmission
FXLINK	ON	FX Link Connected
	Flash	FX Signal Transmission
LFP	ON	LFP enable
	OFF	LFP enable
PWR	ON	Normal
	OFF	Abnormal

DIP Switch (Based on Model)	State	Description
#3	ON	Cut Through Mode
	OFF	Store and Forward
#4	ON	LFP Enable
	OFF	LFP Disable

Package Contents	
Device	1x Managed Media Converter
Installation Kit	1x Region Power Cord
Documentation	1x Quick Installation Guide 1x Warranty Card 1x Product Notice

Precautions

To avoid damage to the equipment and personal injury caused by improper use, please observe the following precautions:

- ❖ Keep the power off during installation, wear an anti-static wrist, and ensure that the anti-static wrist is in good contact with the skin to avoid potential safety hazards.
- ❖ The Media Converter can work normally under the correct power supply. Please confirm that the power supply voltage matches the voltage indicated by the switch.
- ❖ Before powering on the switch, please make sure that the power circuit is not overloaded, so as not to affect the normal operation of the switch and even cause unnecessary damage.
- ❖ To avoid the risk of electric shock, do not open the case while the switch is working, even if it is not charged, do not open it yourself.
- ❖ Before cleaning the switch, pull out the power plug of the switch. Do not wipe with a wet cloth. Do not use liquid to clean it.
- ❖ The equipment installed in the rack is generally from bottom to top to avoid overload installation.
- ❖ Avoid placing other heavy objects on the surface of the switch to avoid accidents.

Order Information

Model Number	10/100Base-T(X) RJ45	10/100/1000Base-T(X), RJ45	100/1000Base-FX Port	Optical Port Connector Option	Type	Input Voltage
FR-6101	1	—	1	LC/SC/ST/FC	Card	5V
FR-6101R	1	—	1	LC/SC/ST/FC	Standalone	AC220V/DC48V
FR-6102	1	—	1	LC/SC/ST/FC	Card	5V
FR-6102R	1	—	1	LC/SC/ST/FC	Standalone	AC220V/DC48V
FR-6103	—	1	1	LC/SC/ST/FC	Card	5V
FR-6103R	—	1	1	LC/SC/ST/FC	Standalone	AC220V/DC48V
FR-6104	—	1	1	LC/SC/ST/FC	Card	5V
FR-6104R	—	1	1	LC/SC/ST/FC	Standalone	AC220V/DC48V

The information in this document is subject to change without notice. Fiberroad has made all effects to ensure the accuracy of the information, but all information in this document does not constitute any kind of warranty. Visit our website for the most up-to-date product information

For more information

For more information about Fiberroad Fiber Media Converter products, Visit <https://www.fiberroad.com> or contact your local account representative.