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Networking & Communication

Product Specification

Bidirectional Media Converter

FT- 706A15/B15

Version 1.1

Change History:

Revision	Date	Author	Change List
Version 1.0	2002/07/10	Marc Liao	Initial release
Version 1.1	2002/09/11	Marc Liao	◆ Change to RiteKom transceiver ◆ Rename to FT-706A15/FT706B15

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1. PRODUCT DESCRIPTION

This converter is used to convert optical Ethernet signal to electrical Ethernet signal that allows two type segments connect easily, efficiently and inexpensively. By deploying WDM technology, only single single-mode fiber is needed to transmit and receive optical Ethernet packets. This converter can be used as a standalone unit or as a slide-in module to the 10" / 19" media chassis (up to 15 units) for a TP and Fiber combined networks at a central wiring closet.

2. PRODUCT FEATURES

- Standard : IEEE802.3u, 100Base-TX and 100Base-FX
- Data Transfer Rate: 100Mbps
- Duplex mode support : Full or half-duplex mode by Auto- Negotiation
- LED indicators : PWR, TX-LNK,TX-ACT, FX-LNK, FX-ACT, FDX
- Cable: UTP : Cat 5 UTP cable
  Fiber : Single Mode: 8.3/125, 8.7/125, 9/125 μm optic fiber

3. PRODUCT SPECIFICATION

3.1 MAIN COMPONENT

Media converter chip: IC+ TP112
Fiber-optic transceiver: RiteKom TSB-0155-32S-P1-3 (FT-706A15) or RiteKom TSB-0155-32S-P1-5
(FT-706B15). Changeable without prior notice

3.2 FUNCTIONAL SPECIFICATIONS

Model	FT-706A15	FT-706B15
Protocols and Standards	IEEE 802.3u (Fast Ethernet)	
Maximum Speed	Full Duplex: 200Mbps (for 100Base-TX) Half Duplex: 100Mbps (for 100Base-TX)	
Cabling	100Base-TX – 2-pair UTP Cat.5, up to 100m (328ft) Fiber : Single mode: 8.3/125, 8.7/125, 9/125 μm optic fiber	
Modes	Half and Full Duplex, auto-negotiation	
Packet Forwarding Rate (64bytes)	148800pps @ 100Mbps	
Connector - Copper	RJ-45	
Connector – Fiber	Single SC-type connector	
Fiber Maximum Distance	15 km	
TX Optical Frequency	1310 nm (1260~1360nm)	1550 nm (1480~1580nm)
RX Optical Frequency	1550 nm (1480~1580nm)	1310 nm (1260~1360nm)
Max. Optical Launch Power	-8 dBm	
Min Optical Launch Power	-14 dBm	
Optical Receive Sensitivity	-31 dBm	

3.3 PHYSICAL SPECIFICATION
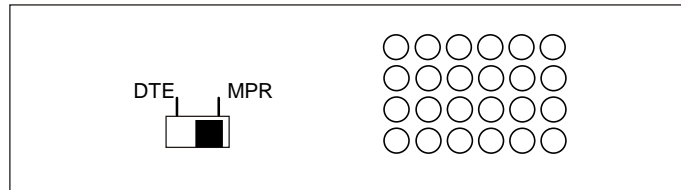
Dimensions

26 x 70 x 97mm (HxWxD)

Weight:

0.2 kg

Right view
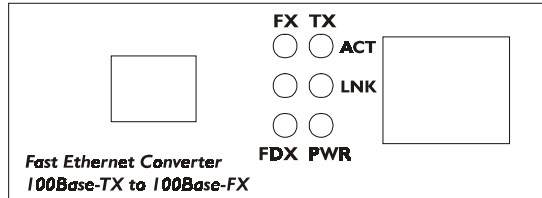
Left view

Side view

LED definition

LED	COLOR	Status	DESCRIPTION
TP ACT	Green	Blinks	If fiber-optic is not present for converter self -diagnose / detecting
		Blinks	If both ports link with any TP packets transmitting
		OFF	Fiber-optic link is present
		OFF	With no TP/FX LINK on, i.e. only turn on the power and the ACT do not blink at all, pleas consult your local dealer
TP Link	Green	ON	TP connection is good
FX ACT	Green	Blinks	When any FX packets transmitting
FX Link	Green	ON	When Fiber connection is good
FDX*	Green	ON	When Full-duplex mode is detected in TP port
PWR	Green	ON	When +5VDC power detected

Note: Fiber-optic partner should set to the correct mode according to this FDX indicator for optimal

network performance.

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3.4 ENVIRONMENTAL SPECIFICATION

Operating

Temperature : 0° to 50°C

Relative Humidity: 5~90%(non-condensing)

Storage

Temperature : -20 to 70°C

Relative Humidity: 5~90%(non-condensing)

3.5 ELECTRICAL SPECIFICATION

Power Requirement :5V ,2A

3.6 REGULATORY COMPLIANCE

FCC Part 15

CE

3.7 RELIABILITY

MTBF > 50,000Hrs @25degree C

3.8 BASIC PACKAGING

1 x Fast Ethernet Converter

1 x AC-DC Power Adapter (Output: 5VDC, 2 A max.)

1 x User's Manual