Redundant Fast Ethernet Media Converter

The PLANET FT-1205A is a 3-Port Redundant Media Converter which supports conversion between 10/100Base-TX and 100Base-FX network. The difference with the other one-port channel media converter is the Redundant Media Converter is designed for critical networks that require fibers or copper links to automatically recover less than 10ms, such as ISPs, telecom, hospitals, banks and enterprises.

Via the build-in DIP-switches, the converter can be configured as 3-Port Ethernet switch or 2-Port Redundant media converter. With the 3-Port Switch mode, it can operate Store-and-Forward mechanism with high performance, and it can also prevent packet loss via IEEE 802.3x Flow Control (Full-Duplex) and Back Pressure (Half-Duplex).

With the 2-Port redundant Mode, it provides less than 10ms redundancy of link for highly critical Ethernet applications. The redundant-mode supports auto-recover function. If the destination port of a packet is link down, it forwards the packet to the other port of the backup pair. The SFP slot supports single-mode, multi-mode and WDM small-form factory type transceiver modules for various applications. The FT-1205A is with high reliability and flexibility to extend the distance up to 2km, 20km or longer. It depends on the 100Base-FX SFP transceiver modules, the Ethernet signal that allows two type segments connect easily, efficiently and inexpensively.

The converters can be used as a stand-alone unit or as a slide-in module to the PLANET Media Converter Chassis, MC-700, MC-1000R and MC-1500. As the other PLAENT FT-Series media converters, they're hot swappable in MC-Chassis.

KEY FEATURE

Standard
- Complies with IEEE 802.3, IEEE 802.3u 10/100Base-TX and 100Base-FX
- IEEE 802.3x Full-Duplex Flow-Control, Back-Pressure in Half-Duplex eliminate packets loss

Interface
- Dual 100Base-FX SFP Fiber optic
- One 10/100Base-TX Copper
- Auto-Negotiation for 100Base-TX Half-Duplex or 100Base-TX Full-Duplex
- Supports Auto MDI/MDI-X function
- Supports Maximum frame size up to 2046 bytes

Redundancy
- Link status auto-detect and redundant on Dual ports with same connector type
- Only Primary-Port is active at a time, the Backup-Port is blocked
- While Primary-Port link fail occurrences, the traffic swaps to Backup-Port automatically
- Once the Primary-Port status backs to link up, the traffic swaps from Backup-Port to Primary-Port
- Hardware redundant swaps less than 10 ms

Mechanical
- External 5V/2A DC power supply
- LED indicators for easy network diagnostic
- DIP Switch for 3-Port operation with Fast Ethernet Switch mode or Redundant mode
- DIP switch for LBR (Loop Back Reply) on / off selection
- Compact size work with PLANET MC family Media Chassis, MC-700 / 1000R / 1500
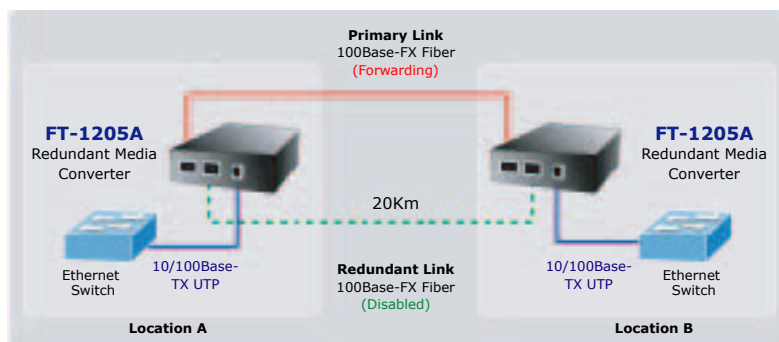
SPECIFICATION

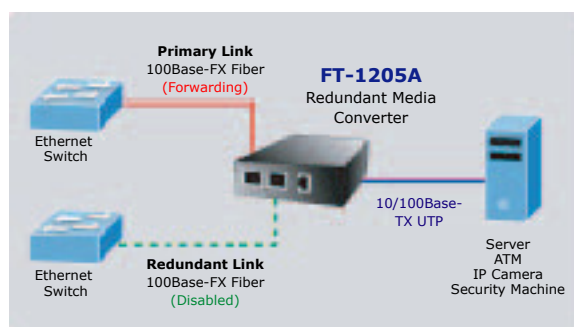| Product		Redundant Fast Ethernet Media Converter
Model		FT-1205A
Ports	Copper	1 x 10/100Base-TX port
	Fiber	2 x 100Base-FX port
Optic Interface		SFP
Optic Wavelength		very on SFP module
Launch Power (dBm)	Max.	very on SFP module
	Min.	very on SFP module
Receive Sensitivity		very on SFP module
Maximum Input Power		very on SFP module
Redundant Link		Port 1 (Primary)
		Port 2 (Backup)
Cable	Twisted-pair	10Base-T: 2-Pair UTP Cat. 3,4,5, up to 100 m
		100Base-TX: 2-Pair UTP Cat. 5, 5e up to 100 m
	Fiber-optic Cable	$50/125\mu m$ or $62.5/125\mu m$ multi-mode fiber cable, up to 2km.
		$9/125\mu m$ single-mode cable, provides long distance for 20/40/60km or longer
		(very on SFP module)
Speed	Twisted-pair	10/20Mbps for Half / Full-Duplex
		100/200Mbps for Half / Full Duplex
	Fiber-optic	200Mbps for Full-Duplex
LED Indicator		System: One Power LED
		TP Port: One Speed
		One LNK / ACT
		Fiber Port: One Link / Act
DIP Switches		DIP 1: On 3-Port Switch Mode
		Off 2-Port Redundant
		DIP 2: On Loop Back Reply Enable
		Off Loop Back Reply Disable
Standards		IEEE 802.3, 10Base-T
		IEEE 802.3u, 100Base-TX, 100Base-FX
		IEEE 802.3x Flow Control
Power Consumption		6.7 Watts (maximum)
Power Input		5V / 2A
Dimensions		93 x 69 x 25 mm
Operator Environment		Operating temperature: 0 to 50 degree C; Humidity: 10~90% non-condensing
Storage Environment		storage temperature: -25 to 70 degree C; Humidity: 10~90% non-condensing

Data Sheet

APPLICATIONS

Fault Tolerant Redundant Link for critical network applications
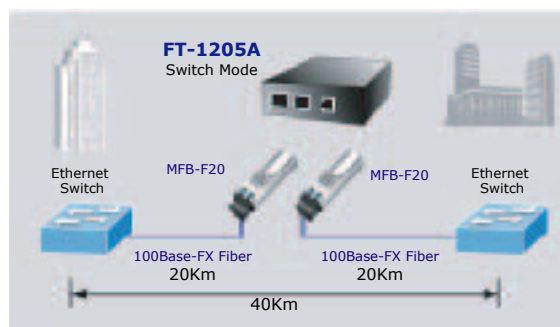
The FT-1205A is designed for optical fiber networks that require rapid link redundancy. With the auto-recover less then 10ms, the redundant media converter provides the rapid response time required for critical applications.

Site to Site Fiber Link Redundancy - ISP, Bank and Enterprise

Link path redundant to critical network service

Fiber Switch mode - distance extension

ORDERING INFORMATION

FT-1205A	10/100Base-TX to 100Base-FX Redundant Media Converter (1 TP, 2 SFP)

RELATED SFP MODULES

MFB-FX	SFP-Port 100Base-FX Transceiver (1310nm) - 2km
MFB-F20	SFP-Port 100Base-FX Transceiver (1310nm) - 20km
MFB-FA20	SFP-Port 100Base-BX Transceiver (WDM, TX:1310nm; RX:1550nm) - 20km
MFB-FB20	SFP-Port 100Base-BX Transceiver (WDM, TX:1550nm; TX:1310nm) - 20km

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PLANET reserves the right to change specifications without prior notice.