



Modular Fiber Converter Rack

The **FRM01** is a media converter rack that can host 12 cards with four 10Base-FL or 100Base-FX media converters on each card. Fourteen converter card configurations are available covering connector types ST, SC, or MT-RJ, cable types for single or multi-mode and distances up to 120KM. All fiber connections are located on the converter card's front panel.

All Ethernet connections utilize shielded RJ-45 connectors, located on the chassis back.

The **FRM01** chassis also features optional redundant power supply modules in configurations for AC (90~240), for DC-48V or DC+24V. The power supplies and all cards are hot-swappable. One card slot is reserved for an optional SNMP card.

Key Features:

- 13-Slot Modular 100FX Media Converter Center
- 12-Slots for converter cards
- Each converter card provides four (4) complete fiber converters
- 10mbps cards comply with IEEE 802.3, 10Base-T and 10Base-FL
- 100mbps cards comply with 802.3u, 100Base-TX and 100Base-FX
- Supports redundant power supplies for high availability
- 4U high, "19"rackmountable
- Supports Half Duplex, Full Duplex or auto-negotiation

CHASSIS SPECIFICATIONS

4U 18-slot chassis	12 Converter cards (maximum, 1 slot each) 2 Power Modules, 2 slots each 1 optional SNMP card 1 slot unavailable
SNMP Management	Optional
Redundant Power	Optional
Max. Slots	12
Max.Loops	48
LAN Ports	Located on rear of chassis
Console Port	RS-232 ASYNC, available with SNMP option
LEDs	Power (one on each supply)
Environment	Temperature: 0 to 70°C Relative Humidity: 10% to 90% non-condensing
Dimension	17.7cm x 43.7cm x 28.5cm (7" x 19" x 11 1/4")
Power	90~240VAC, 50/60Hz, 250W (Redundant) -48V or +24VDC (Redundant)

10Base Media Converter Card Specifications

Card Types	FT-2	FC-2	FT-14	TP Ports	Shielded RJ-45 jacks
Fiber Mode	Multi	Multi	Single	Cable	Cat. 3,4,5 UTP Cable (100m max.)
Wave Length	820nm	820nm	1310nm	LEDs	UTP Link/Act., Fiber Link/Act.
Connector	ST	SC	ST	Environment	Temperature:0 to 70°C
Fiber Cables1	62.5/125μm	62.5/125μm	9/125μm		Relative Humidity:10% to 90% non-condensing
Max. Lengthx2	2km	2km	14km	Dimensions	17.7cm x 25.5cm x 2.4cm
MDI	fixed	fixed	fixed		

100Base Media Converter Card Specifications

Card Types	FXT(C)-2	FCT-3	FXT(C)-3	FXT(C)-5	FXT(C)-12	FCT-5E	FCT-15E
Fiber Mode	Multi	Multi	Single	Single	Single	Single	Single
Wave Length	1310nm	1300nm	1310nm	1310nm	1550nm	1300nm	1300nm
Connector	ST or (SC)	MT-RJ	ST or (SC)	ST or (SC)	ST or (SC)	MT-RJ	MT-RJ
Fiber Cables1	62.5/125μm	62.5/125μm	9/125μm	9/125μm	9/125μm	9/125μm	9/125μm
Max. Len.x2	2km	2km	30km	50km	120km	15km	40km
MDI	fixed	fixed	fixed	fixed	fixed	fixed	fixed

TP Ports	Shielded RJ-45 jacks
Cable	Cat. 5 UTP Cable (100m max.)
LEDs	UTP Link/Rx, Fiber Link/Rx, Half Duplex, Full Duplex
Environment	Temperature: 0 to 40°C
	Relative Humidity: 10% to 90% non-condensing
Dimensions	17.7cm x 25.5cm x 2.4cm

*1 Recommended fiber cable

*2 Maximum length for full duplex connection

Ordering Information

FRM-CON01	Ethernet Fiber Optical Converter Rack, Standard 4U, 19" rack suitable 1 xAC mainboard with 13 card slots
FRM-CON01-110 x 2	Chassis with redundant power, AC 110V
FRM-CON01-110 x 1	Chassis with single power, AC 110V
FRM-CON01-220 x 2	Chassis with redundant power, AC 220V
FRM-CON01-220 x1	Chassis with single power, AC 220V
FRM-CON01-48 x2	Chassis with redundant power, DC -48V
FRM-CON01-48 x1	Chassis with single power, DC -48V
FRM-CON01-24x2	Chassis with redundant power, DC +24V
FRM-CON01-24x1	Chassis with single power, DC +24V

Power Cards

FRM-110	Fiber Converter Rack, AC Power Board (110 Switchable)
FRM-220	Fiber Converter Rack, AC Power Board (220 Switchable)
FRM-48	Fiber Converter Rack, DC/ -48V power board
FRM-24	Fiber Converter Rack, DC/ +24V power board

10M Interface Cards

FRM-CON01-10M/ST2	10Base-T to 10Base-FL Converter Card, Multi-mode, ST, 2Km, 4 loop
FRM-CON01-10M/SC2	10Base-T to 10Base-FL Converter Card, Multi-mode, SC, 2Km, 4 loop
FRM-CON01-10S/ST14	10Base-T to 10Base-FL Converter Card, Single-mode, ST, 14Km, 4 loop

100M Interface Cards

FRM-CON01-100M/ST2	100Base-TX to 100Base-FX Converter Card, Multi-mode, ST, 2Km, 4 loop
FRM-CON01-100M/SC2	100Base-TX to 100Base-FX Converter Card, Multi-mode, SC, 2Kmm, 4 loop
FRM-CON01-100M/MR2	100Base-TX to 100Base-FX Converter Card, Multi-mode, MT-RJ, 2Km, 4 loop
FRM-CON01-100S/MR15	100Base-TX to 100Base-FX Converter Card, Single-mode, MT-RJ, 15Km, 4 loop
FRM-CON01-100S/ST30	100Base-TX to 100Base-FX Converter Card, Single-mode, ST, 30Km, 4 loop
FRM-CON01-100S/SC30	100Base-TX to 100Base-FX Converter Card, Single-mode, SC, 30Km, 4 loop
FRM-CON01-100S/MR40	100Base-TX to 100Base-FX Converter Card, Single-mode, MT-RJ, 40Km, 4 loop
FRM-CON01-100S/ST50	100Base-TX to 100Base-FX Converter Card, Single-mode, ST, 50Km, 4 loop
FRM-CON01-100S/SC50	100Base-TX to 100Base-FX Converter Card, Single-mode, SC, 50Km, 4 loop
FRM-CON01-100S/ST120	100Base-TX to 100Base-FX Converter Card, Single-mode, ST, 120Km, 4 loop
FRM-CON01-100S/SC120	100Base-TX to 100Base-FX Converter Card, Single-mode, SC, 120Km, 4 loop

Optional SNMP card

FRM-CON01-SNMP	Fiber Converter Rack, SNMP card, mib file and manual
-----------------------	--

TEL:(886) 2.2659.1021 (R)
FAX:(886) 2.2799.1355 (R), 2659.0237
E-mail:ctcu@ms2.hinet.net
http://www.ctcu.com
http://www.ctcu.com.tw

Far Eastern Edison Science and Technologies Center (Nei-Hu Hi-TEC Scientific Park) 6F-3, No. 15, Lane 360, Sec. 1, Nei-Hu Road, Nei-Hu, Taipei, Taiwan

All specification are subject to change without any further notice. Copyright 2000, 2001 CTC Union Technologies.



ISO 9001