# FIBER CONVETER

#### Rack-Mount Type

3U Series

**4U Series** 

5U Series

### Standalone Type

**FIB Series** 

FIB1 Series

FIB2 Series

### FRM301 Series Series

The FRM301 Series is a standard 3U Media Converter rack that features 16 cards capability with options for redundant power and SNMP management. Ethernet to fiber converters are available for 10/100 Base (auto) over multi-mode fibers (up to 2KM), single-mode fibers (up to 120KM) or utilizing WDM (up to 20KM). WDM (Wave Division Multiplexing) converts each input data stream into separate wavelengths (colors) and simultaneously transmits these channels through the same optical fiber. Using WDM technology, the RX and TX pair is transmitted with just a single fiber cable instead of the normal fiber pair. Another unique feature of the FRM-301 is the use of a common PCB card which may either be placed in the rack or used as a standalone converter. Manufacturing costs are thereby reduced as well as the inventory of spares required by installers and endusers. Visit our website to see our complete fiber series.









#### FRM301 Series - Line Card Type

- Complies with IEEE 802.3u 100Base-FX and 100Base-TX standards.
- Utilizes WDM technology to provide TX and RX on a single
- Fiber connectivity up to 120Km for single-mode.
- ST or SC connectors accommodate single mode fiber optic cable size 9/125µm.
- One RJ-45 for straight or cross-over connection.
- Full-Duplex, Half-Duplex, or Auto selectable.
- 6 diagnostic LEDs display

PWR : Power on (light) or SNMP active (flash) U/100. : 100M active (light) or 10M active (off)

F/Full : Fx port with Full Duplex (light) or Half Duplex

(off)

U/Full : UTP port with Full Duplex (light) or Half Duplex

(off)

F/Link : Fx port link success (light) or fail (off) U/Link : UTP port link success (light) or fail (off)

2 DIP Switch Setting

SW1 : Fx port Duplex setting

SW2 : Loop-Back test function setting

\*When SW2 is on, the front panel LED will display

(flashing) the Remote CPE unit status.

#### Optional function :

1)Supports Link-Loss-Forwarding function, provides an internal jumper to enable or disable LLF function.

2) Supports with the Loop-Back test via front panel DIP switch.

3)Supports remote monitor status via front panel DIP switch.

4) Supports two Frame length,

......1518/1522 bytes for Normal

......1536/1536 bytes for Special.



#### FRM301 Series - Rack Mount Type

#### Special Features for Rack Mount Type

- 3U high RACK with convertible standalone units. RACK accommodates up to 16 units.
- RACK with Dual power modules designed for redundant application, cooling FANs included..
- Power modules option support AC110~240V, DC24V, or DC48V.
- Alarm display function includes:
  - . Power Fail Alarm
  - . Cooling FAN Fail Alarm
- SNMP Window(R) based GUI management supported, can Monitor all Line
- Card unit status, and configuration setting functions.
- 10/100Base auto negotiation capability.
- Line Card Interface:
   10/100BaseTx: STP RJ-45, Full/Half/Auto duplex selectable.
   100BaseFx: Optional with ST, SC, LC, MT-RJ, VF-45 or WDM for single fiber application.
- Full/Half Duplex selectable

### Ordering Information

FRM301-Chassis Power Cards

FRM301-AC1

FRM301-AC2 FRM301-DC1

FRM301-DC2

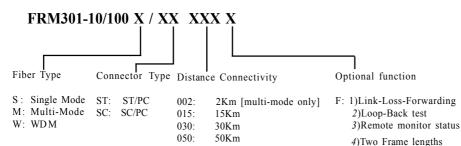
**Optional SNMP Card** 

FRM301-SNMP

Rack-Mount Chassis for both AC & DC type

Single AC power plug-in module Reduntant AC power plug-in module Single DC-48V power plug-in module Reduntant DC-48V power plug-in module

SNMP plug-in card &MIB file and manual



120: 120Km \*20A: 20Km [WDM only] \*20B: 20Km [WDM only] \*20A must use couple with 20B

**Example:** 

FRM301-10/100S/ST030F FRM301-10/100M/SC002 FRM301-10/100W/ST20A Single Mode, ST Type Connector, 30 Km with Optional Features Multi-mode, SC Type Connector, 2 Km without Optional Features WDM, ST Type Connector, 20 Km without Optional Features and must use couple with FRM301-10/100W/ST20B

## FRM401 Series 4U Series

The *FRM401 Series* is a media converter rack that can host 12 cards with four 10/100Base-FX or 10/100Base-FX WDM media converters on each card. Many converter card configurations are available covering connector types ST, SC, LC, VF-45 or MT-RJ, cable types for single or multi-mode and distances up to 120KM. All fiber connections are located on the converter card front panel. All Ethernet connections utilize shielded RJ-45 connectors and are located on the chassis back.

The *FRM401 Series* chassis also features optional redundant power supply modules in configurations for AC 110V or 220V, 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. All link connections may be monitored via any SNMP management software that supports MIB-II file or via our optional Windows(r) based GUI software.





Front View

#### FRM401 Series

- 4U high, 19" rackmountable.
- 12-Slots for converter cards.
- Each converter card provides four (4) complete fiber converters.
- Maximum 48 loops (12 cards times 4 converters per card).
- 10/100Mbps cards comply with 802.3 10Base-T, 802.3u 100Base-TX and 100Base-FX.
- 10/100 WDM (Wavelength Division Multiplexer) cards support both TX and RX on a single fiber.
- 1-Slot reserved for optional SNMP card.
- Supports redundant power supplies for high availability.
- Supports the Power and Fan detect and failing alarm.
- Cooling Fan can be switched independently.
- Supports Half Duplex, Full Duplex or auto-negotiation.
- Universal AC & DC models for either +24 or -48VDC.
- Optional function: 1)Supports Link-Loss-Forwarding function, provides an internal jumper
  - to enable or disable.
    2)Supports Loop-Back test via front panel DIP switch.
  - 3)Supports remote monitor status via front panel DIP switch.
  - 4)Supports two Frame length, 1518/1522 bytes for Normal 1536/1536 bytes for Special.

#### Card Types

#### 10/100Base Media Converter Card Specifications

Card Types	FXT(C)-2	FCT-3	FXT(C)-3	FXT(C)-5	FXT(C)-12	TP Ports	Shielded RJ-45jacks
Fiber Mode	Multi	Multi	Single	Single	Single	Cable	(10BASE-T)Cat. 3,4,5
Wave Length	1310nm	1300nm	1310nm	1310nm	1550nm		(100BASE-TX) Cat. 5 up to 100M
Connector	ST or (SC)	MT-RJ	ST or (SC)	ST or (SC)	ST or (SC)	LEDs	Power, UTP port speed, duplex status and Link/Rx
Fiber Cable *1	62.5/125μm	62.5/125µm	9/125µm	9/125µm	9/125μm		FX port Link/Rx, duplex status
Max.Length *2	2km	2km	30km	50km	120km	Environment	Temperature: 0 ~ 70°c
MDI	fixed	fixed	fixed	fixed	fixed		Relative Humidity: 10% to 90% non-condensing
						Dimensions	17.7cm x 25.5cm x 2.4cm

#### 10/100Base Coupler WDM Media Converter Card Specifications

Card Types	FXT(C)-5	FXT(C)-10	TP Ports	Shielded RJ-45jacks
Fiber Mode	Single	Single	Cable	(10BASE-T)Cat. 3,4,5
Wave Length	1310nm	1300nm		(100BASE-TX) Cat. 5 up to 100M
			LEDs	Power, UTP port speed, duplex status and Link/Rx.
Connector	ST or (SC)	ST or (SC)		FX port Link/Rx, duplex status
Fiber Cable*1	9/125µm	9/125μm	Environment	Temperature: 0 ~ 70°c
Max.Length *2	5km	10km		Relative Humidity: 10% to 90% non-condensing
MDI	fixed	fixed	Dimensions	17.7cm x 25.5cm x 2.4cm

\*1 Recommended fiber cable \*2 Maximum length for full duplex connection



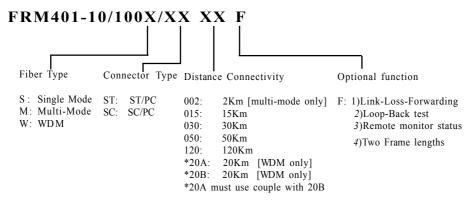
Ethernet Fiber Optical Converter Rack, Standard 4U, 19"rack with AC mainboard, including the fan Ethernet Fiber Optical Converter Rack, Standard 4U, 19"rack with DC mainboard, including the fan FRM401-AC-Chassis FRM401-DC-Chassis

Power Cards

FRM4-AC Fiber Converter Rack, AC Universal Power Board FRM4-48 Fiber Converter Rack, DC/-24~ -48V power board

**Optional SNMP Card** 

FRM401-SNMP SNMP plug-in card, MIB file and manual



#### **Example:**

FRM401-10/100S/ST030F FRM401-10/100M/SC002 FRM401-10/100W/ST20A

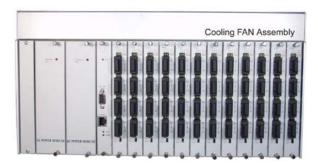
Single Mode, ST Type Connector, 30 Km with Optional Features Multi-mode, SC Type Connector, 2 Km without Optional Features WDM Mode, ST Type Connector, 20 Km without Optional Features and must use couple with FRM301-10/100W/ST20B

## FRM501 Series 5U Series

The *FRM501 Series* 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, LC, VF-45 or MT-RJ, cable types for single or multi-mode and distances up to 120KM. All fiber connections are located on the converter card front panel.

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

The *FRM501 Series* 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. All link connections may be monitored via any SNMP management software that supports MIB-II file or via our optional Windows(r) based GUI software.





Front View



Rear View

#### FRM501 Series

- 4U high, 19" rackmountable.
- 12-Slots for converter cards.
- Each converter card provides four (4) complete fiber converters.
- Maximum 48 loops (12 cards times 4 converters per card).
- 10Mbps cards comply with IEEE 802.3, 10Base-T and 10Base-FL.
- 100Mbps cards comply with 802.3u, 100Base-TX and 100Base-FX.
- 10/100Mbps cards comply with 802.3 10Base-T, 802.3u 100Base-TX and 100Base-FX.
- 10/100 WDM (Wavelength Division Multiplexer) cards support both TX and RX on a single fiber.
- 1-Slot reserved for optional SNMP card.
- Cooling Fan could be switched independently.
- Supports redundant power supplies for high availability.
- Supports Half Duplex, Full Duplex or auto-negotiation.
- Universal AC & DC models for either +24 or -48VDC.

#### Card Types

#### **10Base Media Converter Card Specifications**

Card Types	FT-2	FC-2	FT-14	TP Ports	Shielded RJ-45jacks
Fiber Mode	Multi	Multi	Single	Cable	Cat. 3,4,5, UTP Cable (100m max.)
Wave Length	n 820nm	820nm	1310nm	LEDs	UTP Link/Act., Fiber Link/Act.
Connector	ST	SC	ST	Environment	Temperature: 0 to 70°C
Fiber Cable x	c1 62.5/125μn	n 62.5/125μm	9/125µm		Relative Humidity: 10% to 90% non-condensing
Max.Length:	x2 2km	2km	14km	Dimensions	17.7cm x 25.5cm x 2.4cm
MDI	fixed	fixed	fixed		

#### 100Base Media Converter Card Specifications

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Card Types	FXT(C)-2	FCT-3	FXT(C)-3	FXT(C)-5	FXT(C)-12	TP Ports	Shielded RJ-45jacks
Fiber Mode	Multi	Multi	Single	Single	Single	Cable	(10BASE-T)Cat. 3,4,5
Wave Length	1310nm	1300nm	1310nm	1310nm	1550nm		(100BASE-TX) Cat. 5 up to 100M
Connector	ST or (SC)	MT-RJ	ST or (SC)	ST or (SC)	ST or (SC)	LEDs	Power status of converter, RJ-45 port and FX port
Fiber Cable x1	62.5/125µm	62.5/125µm	9/125µm	9/125µm	9/125µm		activity, and Full or Half Duplex status
Max.Length x2	2km	2km	30km	50km	120km	Environment	Temperature: 0 to 70°C
MDI	fixed	fixed	fixed	fixed	fixed		Relative Humidity: 10% to 90% non-condensing
						Dimensions	17.7cm x 25.5cm x 2.4cm



FRM501-AC-Chassis Ethernet Fiber Optical Converter Rack, 5U, 19 rack with AC mainboard, including the fan Ethernet Fiber Optical Converter Rack, 5U, 19 rack with DC mainboard, including the fan

Power Cards

FRM5-AC Fiber Converter Rack, AC Universal Power Board FRM5-48 Fiber Converter Rack, DC/-24~ -48V power board

Optional SNMP Card

FRM501-SNMP SNMP plug-in card &MIB file and manual

#### 10M Interface Cards

FRM501-10M/ST2	10Base-T to	10Base-FL	Converter Card	l, Multi-mode, ST, 2Km, 4 Loop
FRM501-10M/SC2	10Base-T to	10Base-FL	Converter Card	l, Multi-mode, SC, 2Km, 4 Loop
FRM501-10S/ST14	10Base-T to	10Base-FL	Converter Card	l, Single-mode, ST, 14Km, 4 Loop

#### 100M Interface Cards

FRM501-100M/ST2	100Base-TX to 100Base-FX Converter Card, Multi-mode, ST, 2Km, 4 Loop
FRM501-100M/SC2	100Base-TX to 100Base-FX Converter Card, Multi-mode, SC, 2Km, 4 Loop
FRM501-100S/ST30	100Base-TX to 100Base-FX Converter Card, Single-mode, ST, 30Km, 4 Loop
FRM501-100S/SC30	100Base-TX to 100Base-FX Converter Card, Single-mode, SC, 30Km, 4 Loop
FRM501-100S/ST50	100Base-TX to 100Base-FX Converter Card, Single-mode, ST, 50Km, 4 Loop
FRM501-100S/SC50	100Base-TX to 100Base-FX Converter Card, Single-mode, SC, 50Km, 4 Loop
FRM501-100S/ST120	100Base-TX to 100Base-FX Converter Card, Single-mode, ST, 120Km, 4 Loop
FRM501-100S/SC120	100Base-TX to 100Base-FX Converter Card, Single-mode, SC, 120Km, 4 Loop

## FIB Series Standalone Type

The FIB-XX Series are standalone fiber media converters available in models for 10Base-T, 100Base-TX, 10/100 Ethernet, RS-232 data port or RS-422 data port. The FIB-10, FIB-100, and FIB10/100 of Ethernet Fiber Converters give you the options to choose from the two most popular fiber cabling connectors, ST or SC. Both multimode and single mode converter models are available and well as WDM (wave division multiplexing) which allows TX and RX to use a single fiber cable. The Ethernet connections are all provided by shielded RJ-45 jacks and incorporate either a connector pair or a selector switch to allow connection to either HUB or PC equipment. When auto-negotiation is selected, these units will automatically tailor themselves to convert both half-duplex and full-duplex signals, depending on your specific network needs. LED indicators signal the power status of the converter, UTP port speed, duplex status and Link/RX and FX port Link/RX and duplex status. The data port models FIB-232 and FIB-422 provide trans parent connection of their respective interface type over multi-mode cable up to 2KM without the need for any software drivers.

FIB-232
FIB-232IP
FIB-422
FIB-10
FIB-100
FIB-10/100
<i>FIB-10/100W</i>







#### FIB-232 & FIB-232IP

#### 10Base-T to 10Base-FL Fiber ST Converter (multi-mode only)

#### **FEATURES**

- Compact, requires no external power.
- RS-232 at rates up to 115.2Kbps.
- Extends RS-232 up to 2Km.
- (14Km single mode available upon request)
- No external power required.
- Secure data transmissions.
- Full Duplex bi-directional transmissions.
- Transparent operation, no drivers required.

#### FIB-422

#### 10Base-T to 10Base-FL Fiber ST Converter (multi-mode only)

#### **FEATURES**

- Compact desige
- Extends RS-422 up to 2Km.
- RS-422 at rates up to 115,200 baud.
- ST connector accommodates multi-mode fiber optic cable size 62.5/125µm.
- Secure data transmissions.
- Provides electromagnetic immunity.
- Full Duplex, bi-directional operation.
- Transparent operation.
- DC powered from AC adapter.

#### FIB-10

#### 10Base-T to 10Base-FL Fiber SC Converter

#### **FEATURES**

- Complies with IEEE 802.3 10Base-FL standards.
- Fiber connectivity up to 14Km.
- ST/SC connector can accommodate multi-mode size of 62.5/125μm
- RJ-45 straight/ crossed selector switch
- 5 diagnostic LEDs





#### FIB-100 & FIB10/100

#### Fiber 10/100 Mbps/ST or SC Converter

#### FEATURES

- Complies with IEEE 802.3 10Base-T, 802.3u 100Base-TX and 100Base-FX standards.
- Fiber connectivity up to 120Km for single-mode.
- ST or SC connector can accommodate single-mode size of 9/125μm.
- Two RJ-45 for straight or cross-over connection.
- Full-Duplex, Half-Duplex or Auto selectable
- 5 duagbistuc LEDs for FIB-100; 6 diagnostic LEDs for FIB10/100

#### FIB-10/100W

#### Fiber 10/100 Mbps WDM /ST or SC Converter (single-mode)

#### **FEATURES**

- Complies with IEEE 802.3 10Base-T, 802.3u 100Base-TX and 100Base-FX standards.
- Utilizes WDM technology to provide TX and RX on a single fiber cable.
- Fiber connectivity up to 20Km for single-mode.
- ST or SC connector can accommodate single-mode size of 9/125μm.
- Two RJ-45 for straight or cross-over connection.
- Full-Duplex, Half-Duplex or Auto selectable
- 6 diagnostic LEDs

### Ordering Information

•	FIB-232/ST	RS-232 to Fiber Converter, ST, Multi-mode, 2Km
•	FIB-422/ST	RS-422 to Fiber Converter, ST, Multi-mode, 2Km
	FIB-10M/ST2	10 Base-T to fiber converter, multi mode, ST, 2Km
	FIB-10M/SC2	10 Base-T to fiber converter, multi mode, SC, 2Km
•	FIB-10S/ST14	10 Base-T to fiber converter, single mode, ST, 14Km
•	FIB-100S/ST15	100 Base-TX to fiber converter, single mode, ST, 15Km
	FIB-100S/SC15	100 Base-TX to fiber converter, single mode, SC, 15Km
•	FIB-100S/ST30	100 Base-TX to fiber converter, single mode, ST, 30Km
•	FIB-100S/SC30	100 Base-TX to fiber converter, single mode, SC, 30Km
•	FIB-100S/ST50	100 Base-TX to fiber converter, single mode, ST, 50Km
	FIB-100S/SC50	100 Base-TX to fiber converter, single mode, SC, 50Km
	FIB-100S/ST120	100 Base-TX to fiber converter, single mode, ST, 120Km
	FIB-100S/SC120	100 Base-TX to fiber converter, single mode, SC, 120Km
	FIB-100M/ST2	100 Base-TX to fiber converter, multi mode, ST, 2Km
•	FIB-100M/SC2	100 Base-TX to fiber converter, multi mode, SC, 2Km
•	FIB-10/100S/ST15	10/100 Base-T to fiber converter, single mode, ST, 15Km
	FIB-10/100S/SC15	10/100 Base-T to fiber converter, single mode, SC, 15Km
•	FIB-10/100S/ST30	10/100 Base-T to fiber converter, single mode, ST, 30Km
•	FIB-10/100S/SC30	10/100 Base-T to fiber converter, single mode, SC, 30Km
•	FIB-10/100S/ST50	10/100 Base-T to fiber converter, single mode, ST, 50Km
•	FIB-10/100S/SC50	10/100 Base-T to fiber converter, single mode, SC, 50Km
	FIB-10/100S/ST120	10/100 Base-T to fiber converter, single mode, ST, 120Km
•	FIB-10/100S/SC120	10/100 Base-T to fiber converter, single mode, SC, 120Km
	FIB-10/100M/ST2	10/100 Base-T to fiber converter, multi mode, ST, 2Km
•	FIB-10/100M/SC2	10/100 Base-T to fiber converter, multi mode, SC, 2Km
•	FIB-10/100W/ST20A	10/100 Base-T to WDM fiber converter, ST connector, 20Km (Matches with FIB-10/100W/ST20B)
	FIB-10/100W/ST20B	10/100 Base-T to WDM fiber converter, ST connector, 20Km (Matches with FIB-10/100W/ST20A)
	FIB-10/100W/SC20A	10/100 Base-T to WDM fiber converter, SC connector, 20Km (Matches with FIB-10/100W/SC20B)
	FIB-10/100W/SC20B	10/100 Base-T to WDM fiber converter, SC connector, 20Km (Matches with FIB-10/100W/SC20A)

## FIB1 Series Standalone Type

The FIB1 Series are standalone fiber media converters available in models for 10/100 Ethernet, and provide optional functions for LLF (link loss forwarding), loop-back test, and remote get CPE status. These optional features are especially useful when the standalone units are linked to one of our Rack type units with optional SNMP management. The FIB1-10/100 Ethernet Fiber Converters give you the options to choose from the two most popular fiber cabling connectors, ST or SC. Both multimode and single mode converter models are available and well as WDM (wave division multiplexing) which allows TX and RX to use a single fiber cable. The Ethernet connections are all provided by shielded RJ-45 jacks and incorporate either a connector pair or a selector switch to allow connection to either HUB or PC equipment. When auto-negotiation is selected, these units will automatically tailor themselves to convert both half-duplex and full-duplex signals, depending on your specific network needs. LED indicators signal the power status of the converter, UTP port speed, duplex status and Link/RX and FX port Link/RX and duplex status.

#### FIB1-10/100 FIB1-10/100W



#### FIB1-10/100

#### Fiber 10/100 Mbps ST or SC Converter (single-mode)

#### FEATURES

- Complies with IEEE 802.3 10Base-T, 802.3u 100Base-TX and 100Base-FX standards.
- Fiber connectivity up to 20Km for single-mode.
- ST or SC connector can accommodate single-mode size of 9/125μm.
- Two RJ-45 for straight or cross-over connection.
- Full-Duplex, Half-Duplex or Auto selectable
- 6 diagnostic LEDs



#### FIB1-10/100W

#### Fiber 10/100 Mbps WDM ST or SC Converter (single-mode)

#### **FEATURES**

- Complies with IEEE 802.3 10Base-T, 802.3u 100Base-TX and 100Base-FX standards.
- Utilizes WDM technology to provide TX and RX on a single fiber cable.
- Fiber connectivity up to 20Km for single-mode.
- ST or SC connector can accommodate single-mode size of 9/125μm.
- Two RJ-45 for straight or cross-over connection.
- Full-Duplex, Half-Duplex or Auto selectable
- 6 diagnostic LEDs

## Ordering Information

#### \*10/100M Type - Regular Function

FIB1-10/100M/ST2	10/100Base-TX to 100Base-FX Line Card, Multi-Mode, ST, 2Km
FIB1-10/100M/SC2	10/100Base-TX to 100Base-FX Line Card, Multi-Mode, SC, 2Km
FIB1-10/100S/ST15	10/100Base-TX to 100Base-FX Line Card, Single Mode, ST, 15Km
FIB1-10/100S/SC15	10/100Base-TX to 100Base-FX Line Card, Single Mode, SC, 15Km
FIB1-10/100S/ST30	10/100Base-TX to 100Base-FX Line Card, Single Mode, ST, 30Km
FIB1-10/100S/SC30	10/100Base-TX to 100Base-FX Line Card, Single Mode, SC, 30Km
FIB1-10/100S/ST50	10/100Base-TX to 100Base-FX Line Card, Single Mode, ST, 50Km
FIB1-10/100S/SC50	10/100Base-TX to 100Base-FX Line Card, Single Mode, SC,50Km
FIB1-10/100S/ST120	10/100Base-TX to 100Base-FX Line Card, Single Mode, ST, 120Km
FIB1-10/100S/SC120	10/100Base-TX to 100Base-FX Line Card, Single Mode, SC,120Km

#### \*10/100M Type - Full Function (Supports Optional Functions)

FIB1-10/100M/ST2F	10/100Base-TX to 100Base-FX Line Card, Multi-Mode, ST, 2Km
FIB1-10/100M/SC2F	10/100Base-TX to 100Base-FX Line Card, Multi-Mode, SC, 2Km
FIB1-10/100S/ST15F	10/100Base-TX to 100Base-FX Line Card, Single Mode, ST, 15Km
FIB1-10/100S/SC15F	10/100Base-TX to 100Base-FX Line Card, Single Mode, SC, 15Km
FIB1-10/100S/ST30F	10/100Base-TX to 100Base-FX Line Card, Single Mode, ST, 30Km
FIB1-10/100S/SC30F	10/100Base-TX to 100Base-FX Line Card, Single Mode, SC, 30Km
FIB1-10/100S/ST50F	10/100Base-TX to 100Base-FX Line Card, Single Mode, ST, 50Km
FIB1-10/100S/SC50F	10/100Base-TX to 100Base-FX Line Card, Single Mode, SC,50Km
FIB1-10/100S/ST120F	10/100Base-TX to 100Base-FX Line Card, Single Mode, ST, 120Km
FIB1-10/100S/SC120F	10/100Base-TX to 100Base-FX Line Card, Single Mode, SC,120Km

#### \*10/100M WDM Type - Regular Function

•	1 8
FIB1-10/100W/ST20A	10/100Base-TX to 100Base-FX WDM Line Card, ST, 20Km
FIB1-10/100W/ST20B	10/100Base-TX to 100Base-FX WDM Line Card, ST, 20Km
FIB1-10/100W/SC20A	10/100Base-TX to 100Base-FX WDM Line Card, SC, 20Km
FIB1-10/100W/SC20B	10/100Base-TX to 100Base-FX WDM Line Card, SC, 20Km

#### \*10/100M WDM Type - Full Function (Supports Optional Functions)

FIB1-10/100W/ST20AF 10/100Base-TX to 100Base-FX WDM Line Card, ST, 20Km FIB1-10/100W/ST20BF 10/100Base-TX to 100Base-FX WDM Line Card, ST, 20Km FIB1-10/100W/SC20AF 10/100Base-TX to 100Base-FX WDM Line Card, SC, 20Km FIB1-10/100W/SC20BF 10/100Base-TX to 100Base-FX WDM Line Card, SC, 20Km

## FIB2 Series Standalone Type

The FIB2 Series are standalone fiber media converters with universal AC power supplies built-in, available in models for 100Base-TX or 10/100 Ethernet, and provide optional functions for LLF (link loss forwarding), loop-back test, and remote get CPE status. These optional features are especially useful when the standalone units are linked to one of our Rack type units with optional SNMP management. The FIB2 series Ethernet Fiber Converters give you the options to choose from two of the most popular fiber cabling connectors, ST or SC. Both multimode and single mode converter models are available and well as WDM (wave division multiplexing) which allows TX and RX to use a single fiber cable. The Ethernet connections are all provided by shielded RJ-45 jacks and incorporate a selector switch to allow connection to either HUB or PC equipment. When auto-negotiation is selected, these units will automatically tailor themselves to convert both half-duplex and full-duplex signals, depending on your specific network needs. LED indicators signal the power status of the converter, UTP port speed, duplex status and Link/RX and FX port Link/RX and duplex status.

FIB2-100
FIB2-100W
FIB2-10/100
FIB2-10/100W
FIB2-10/100F
FIB2-10/100WF



#### FIB2 Series

#### **Common Features**

- Universal AC power built-in
- Supports 90~250VAC, 50/60Hz operation
- Dimension: 191.7mm x 85.6mm x 30mm (LxWxH)

#### FIB2-100 & FIB2-10/100

#### Fiber 10/100 Mbps ST or SC Converter (single-mode)

#### **FEATURES**

- Complies with IEEE 802.3 10Base-T, 802.3u 100Base-TX and 100Base-FX standards.
- Fiber connectivity up to 20Km for single-mode.
- ST or SC connector can accommodate single-mode size of 9/125µm.
- Two RJ-45 for straight or cross-over connection.
- Full-Duplex, Half-Duplex or Auto selectable
- 6 diagnostic LEDs



#### FIB2-100W & FIB2-10/100W

#### Fiber 10/100 Mbps WDM ST or SC Converter (single-mode)

#### **FEATURES**

- Complies with IEEE 802.3 10Base-T, 802.3u 100Base-TX and 100Base-FX standards.
- Utilizes WDM technology to provide TX and RX on a single fiber cable.
- Fiber connectivity up to 20Km for single-mode.
- ST or SC connector can accommodate single-mode size of 9/125μm.
- Two RJ-45 for straight or cross-over connection.
- Full-Duplex, Half-Duplex or Auto selectable
- 6 diagnostic LEDs

### Ordering Information

## 100M

#### \*100M Type - Regular Function

FIB2-100M/ST2	100Base-TX to 100Base-FX Line Card, Multi-Mode, ST, 2Km
FIB2-100M/SC2	100Base-TX to 100Base-FX Line Card, Multi-Mode, SC, 2Km
FIB2-100S/ST15	100Base-TX to 100Base-FX Line Card, Single Mode, ST, 15Km
FIB2-100S/SC15	100Base-TX to 100Base-FX Line Card, Single Mode, SC, 15Km
FIB2-100S/ST30	100Base-TX to 100Base-FX Line Card, Single Mode, ST, 30Km
FIB2-100S/SC30	100Base-TX to 100Base-FX Line Card, Single Mode, SC, 30Km
FIB2-100S/ST50	100Base-TX to 100Base-FX Line Card, Single Mode, ST, 50Km
FIB2-100S/SC50	100Base-TX to 100Base-FX Line Card, Single Mode, SC,50Km
FIB2-100S/ST120	100Base-TX to 100Base-FX Line Card, Single Mode, ST, 120Km
FIB2-100S/SC120	100Base-TX to 100Base-FX Line Card, Single Mode, SC,120Km

#### \*100M WDM Type - Regular Function

FIB2-100W/ST20A	100Base-TX to 100Base-FX WDM Line Card, ST, 20Km
FIB2-100W/ST20B	100Base-TX to 100Base-FX WDM Line Card, ST, 20Km
FIB2-100W/SC20A	100Base-TX to 100Base-FX WDM Line Card, SC, 20Km
FIB2-100W/SC20B	100Base-TX to 100Base-FX WDM Line Card, SC, 20Km



#### \*10/100M Type - Regular Function

FIB2-10/100M/ST2	10/100Base-TX to 100Base-FX Line Card, Multi-Mode, ST, 2Km
FIB2-10/100M/SC2	10/100Base-TX to 100Base-FX Line Card, Multi-Mode, SC, 2Km
FIB2-10/100S/ST15	10/100Base-TX to 100Base-FX Line Card, Single Mode, ST, 15Km
FIB2-10/100S/SC15	10/100Base-TX to 100Base-FX Line Card, Single Mode, SC, 15Km
FIB2-10/100S/ST30	10/100Base-TX to 100Base-FX Line Card, Single Mode, ST, 30Km
FIB2-10/100S/SC30	10/100Base-TX to 100Base-FX Line Card, Single Mode, SC, 30Km
FIB2-10/100S/ST50	10/100Base-TX to 100Base-FX Line Card, Single Mode, ST, 50Km
FIB2-10/100S/SC50	10/100Base-TX to 100Base-FX Line Card, Single Mode, SC,50Km
FIB2-10/100S/ST120	10/100Base-TX to 100Base-FX Line Card, Single Mode, ST, 120Km
FIB2-10/100S/SC120	10/100Base-TX to 100Base-FX Line Card, Single Mode, SC,120Km

#### \*10/100M Type - Full Function (Supports Optional Functions)

FIB2-10/100M/ST2F	10/100Base-TX to 100Base-FX Line Card, Multi-Mode, ST, 2Km
FIB2-10/100M/SC2F	10/100Base-TX to 100Base-FX Line Card, Multi-Mode, SC, 2Km
FIB2-10/100S/ST15F	10/100Base-TX to 100Base-FX Line Card, Single Mode, ST, 15Km
FIB2-10/100S/SC15F	10/100Base-TX to 100Base-FX Line Card, Single Mode, SC, 15Km
FIB2-10/100S/ST30F	10/100Base-TX to 100Base-FX Line Card, Single Mode, ST, 30Km
FIB2-10/100S/SC30F	10/100Base-TX to 100Base-FX Line Card, Single Mode, SC, 30Km
FIB2-10/100S/ST50F	10/100Base-TX to 100Base-FX Line Card, Single Mode, ST, 50Km
FIB2-10/100S/SC50F	10/100Base-TX to 100Base-FX Line Card, Single Mode, SC,50Km
FIB2-10/100S/ST120F	10/100Base-TX to 100Base-FX Line Card, Single Mode, ST, 120Km
FIB2-10/100S/SC120F	10/100Base-TX to 100Base-FX Line Card, Single Mode, SC,120Km

#### \*10/100M WDM Type - Regular Function

FIB2-10/100W/ST20A	10/100Base-TX to 100Base-FX WDM Line Card, ST, 20Km
FIB2-10/100W/ST20B	10/100Base-TX to 100Base-FX WDM Line Card, ST, 20Km
FIB2-10/100W/SC20A	10/100Base-TX to 100Base-FX WDM Line Card, SC, 20Km
FIB2-10/100W/SC20B	10/100Base-TX to 100Base-FX WDM Line Card, SC, 20Km

#### \*10/100M WDM Type - Full Function (Supports Optional Functions)

FIB2-10/100W/ST20AF 10/100Base-TX to 100Base-FX WDM Line Card, ST, 20Km
FIB2-10/100W/ST20BF 10/100Base-TX to 100Base-FX WDM Line Card, ST, 20Km
FIB2-10/100W/SC20AF 10/100Base-TX to 100Base-FX WDM Line Card, SC, 20Km
FIB2-10/100W/SC20BF 10/100Base-TX to 100Base-FX WDM Line Card, SC, 20Km