



Product Description

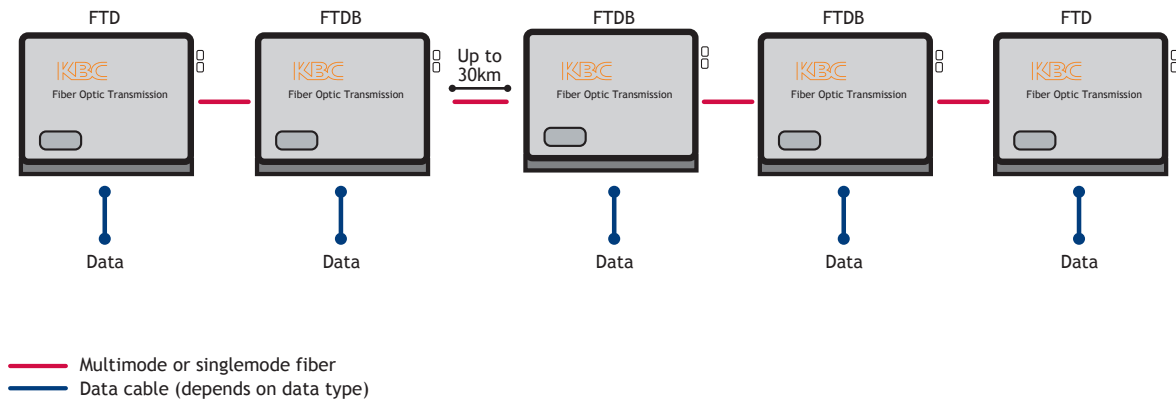
The KBC FTDB and FTD series products provide an optical bus network for RS-232, RS-422 or RS-485 data interfaces over one or two multimode or singlemode optical fibers. The FTD units operate as the end or terminal points and provide an electrical connection and a single optical connection. The FTDB units act as in-line repeater stations and provide a single electrical connection and two optical connections, one upstream and one downstream. This series is available in either wall-mount, DIN rail or 3U chassis card configurations.



Product Features

- Multi-protocol data interface
- Switchable termination and biasing
- Multimode and singlemode
- Wall-mount, DIN and 3U chassis card

Typical System Configuration



Specifications

Data⁽¹⁾

Data Formats	RS232, RS422, RS485 (2W & 4W)
Number of Two-way Channels	1
RS-232 Data Rate	300 bps ~ 115.2 kbps
RS-422/485 Data Rate	300 bps ~ 230 kbps
Bit error rate	<1 x 10 ⁻¹²
Encoding schemes	Manchester, Bi-Phase, NRZ, NRZI
Maximum Access Nodes	128

Optical

Wavelength	1310 / 1550nm
Fiber	Multimode or Singlemode
Number of Fibers	1 or 2 (between each unit)

Power

Power Input (Wall-mount & DIN Rail)	12-24 Vac/dc
Power Supply ⁽²⁾	Input: 100 ~ 240 Vac Output: +12 Vdc UL and cUL listed PSU
Chassis Card	Supplied from FR3 PSU

Environmental

Operating Temperature	-40° ~ +74°C / -40° ~ +165°F
Storage Temperature	-45° ~ +74°C / -40° ~ +165°F
Operating Humidity	0 to 95% non-condensing
Mean Time Between Failure (MTBF)	>100,000 Hours

Mechanical

Dimensions (L x W x H) ⁽⁵⁾	70mm x 61mm x 44mm (2.76" x 2.40" x 1.73") (Wall-mount & DIN Rail)
Number of 3U Chassis Card Slot ⁽³⁾	FTD: 1 slot FTDB: 2 slots

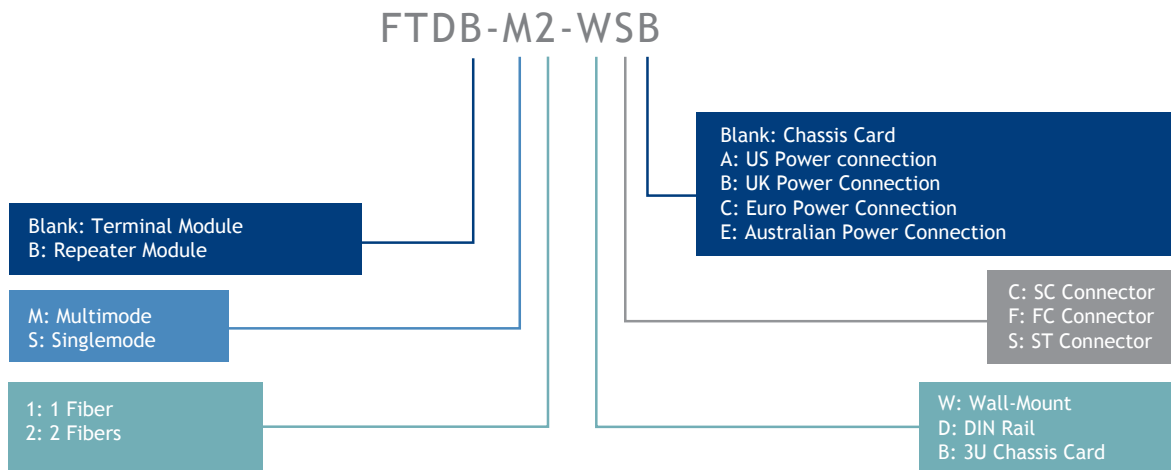
Connectors

Data	4 way Screw Block Terminal
Fiber	ST, SC or FC (ST fitted as standard)
Power ⁽⁴⁾	Screw Block Terminal

DIP Switch Settings

Data ⁽⁵⁾	Switch selectable
120Ω termination	On / Off
Biasing	On / Off

Part Number Configurator



Optical Budget

Part Code	Fiber Type	No.	Optical Budget			Wavelength nm	Approximate Transmission Distance ⁽⁴⁾
			50µm	62.5µm	9µm		
FTD-M	Multimode	1 or 2	11dB	15dB		1310 / 1550	0-4km
FTDB-M-*	Multimode	1 or 2	11dB	15dB		1310 / 1550	0-4km
FTD-S	Singlemode	1 or 2			15dB	1310 / 1550	0-30km
FTDB-S-*	Singlemode	1 or 2			15dB	1310 / 1550	0-30km

1. RS232, RS422 and RS485 are field selectable.

2. Please select the power plug from US 2 pin flat, Euro 2 pin circular or UK 3 pin square when placing order.

3. 14 slots in the FR3 chassis.

4. Transmission distance is limited by optical loss of the fiber and loss introduced by connectors, splices and patch panels. Fiber bandwidth also limits the transmission distance.

5. Product body dimensions. Please contact KBC Networks for product drawing and dimensions of mount.

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