

Product Description

The KBC FTCB series products provide an optical bus network connection for CAN bus data interfaces on one or two, multimode or singlemode optical fibers. The FTCB units act as the end or terminal points, and in-line repeater stations, and provide a single electrical connection and two optical connections, one upstream and one downstream. This series support both CAN 1.0 and CAN 2.0 standards and are transparent to all high level protocols. The maximum transmission distance is limited by CAN protocol.

This series is available in either wall-mount, DIN rail or 3U chassis card configurations.

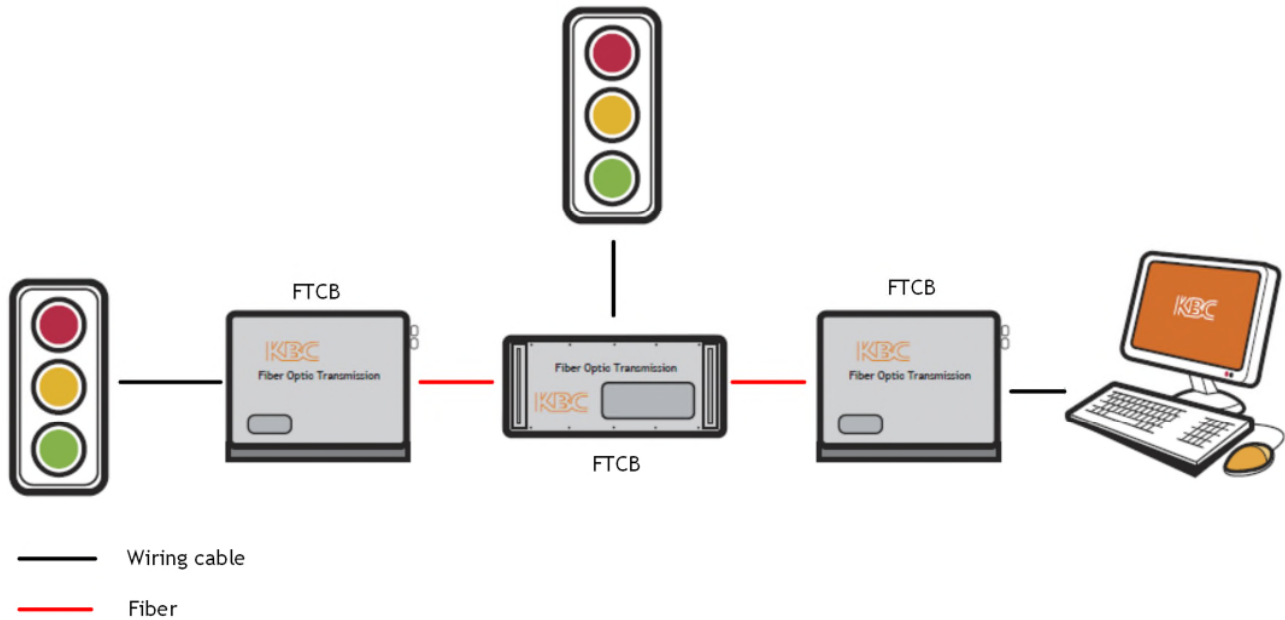
The point-to-point FTC units cannot be used as the end or terminal points on the bus network constructed by bus FTCB units.



Product Features

- Up to 1Mbps data rate
- Switchable 110Ω line termination
- Multimode and singlemode
- Single fiber and dual fibers solutions
- Wall-mount, DIN Rail, chassis configurations
- LED indicators provide quick diagnosis of all important system parameters

Typical System Configuration



Specifications

Data

Data Formats	CAN1.0, CAN2.0
Two Way Channels	1
CAN Data Rate	Up to 1 Mbps
Bit Error Rate	<1 x 10 ⁻¹²

Optical

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

Power

Power Input Wall-mount & DIN Rail	+12 Vdc
Power Supply for Wall-mount & DIN Rail ⁽¹⁾	Input: 100-240Vac Output: 12Vdc
Chassis Card	Supplied from FR3 PSU

Environmental

Operating Temperature	-40° ~ +70°C
Storage Temperature	-40° ~ +70°C
Operating Humidity	0 to 95% non-condensing
Mean Time Between Failure (MTBF)	> 100,000 Hours

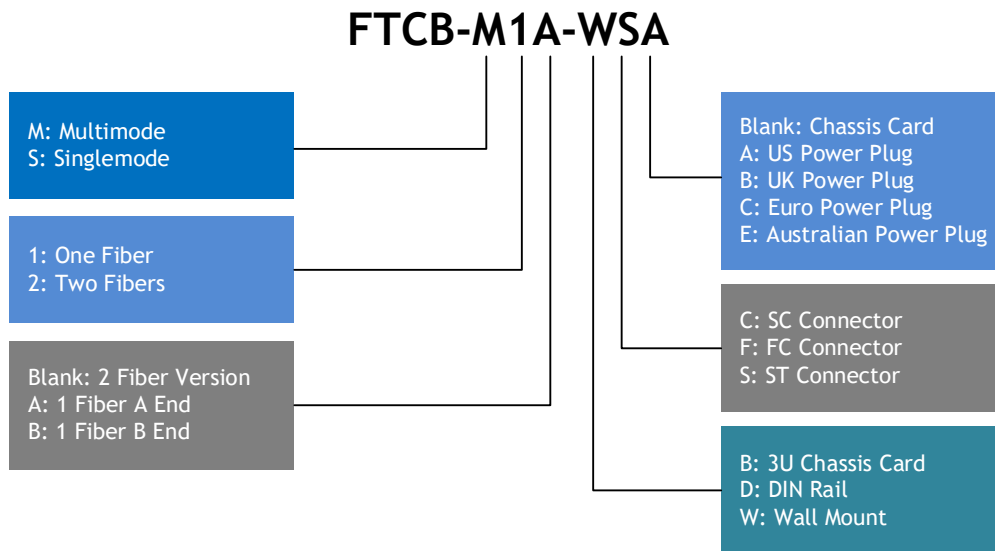
Mechanical

Dimensions (Wall Mount & DIN Rail L x W x H)	135mm x 116mm x 36mm (5.31" x 4.57" x 1.42")
Number of 3U Chassis Card Slot ⁽²⁾	1

Connectors

Data	Screw Block Terminal
Fiber ⁽²⁾	ST, FC or SC (ST fitted as standard)
Power	Screw Block Terminal

Part Number Configurator



Optical Budget

Part Code	Fiber Type	No.	Optical Budget		Wavelength (nm)	Approximate Transmission Distance
			62.5µm	9µm		
FTCB-M1*	Multimode	1	12dB		1310/1550	Refer to Distance Section
FTCB-M2	Multimode	2	12dB		1310	Refer to Distance Section
FTCB-S1*	Singlemode	1		15dB	1310/1550	Refer to Distance Section
FTCB-S2	Singlemode	2		15dB	1310	Refer to Distance Section

Distance

The maximum distance is determined by the data rate of CAN protocol as shown in below table. The fiber cannot be used to extend the distance. The fiber length is counted as part of the maximum distance.

Data Rate	5 kbps	10 kbps	20 kbps	50 kbps	100 kbps	125 kbps	250 kbps	500 kbps	1 Mbps
Distance	10km	6.7km	3.3km	1.3km	620m	530m	270m	130m	40m

- Please select the power plug from US Standard, Euro 2 Circular, UK 3 Pin square or Australian Standard when placing order.
- Please select the fiber connector when placing order.

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