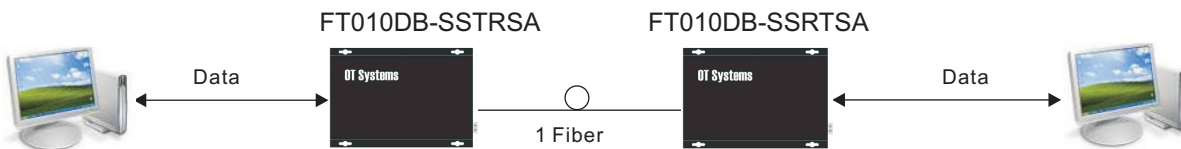# FT0X0DB Series

Digital 1 or 4 Bi-directional Data

The FT0X0DB series supports optical transmission of digital-quality bi-directional data through one fiber either in multimode or singlemode.

It provides a flexible solution for the transmission of either one or four data channel(s). User can select RS232, RS422 or RS485(2 or 4-wire) by DIP switches. Either standalone or card module is available for different installation requirements.

Features

- One or four bi-directional data transmission
- Supports multi-protocol data in RS232, RS422 & RS485(2 or 4-wire) Tri-state formats
- External access for data format selection via DIP switches
- Suitable for alarm system, traffic control system, access control system, data equipment, etc
- Laser diode for optical transmission
- Optimum sensitivity for power budget concerns
- Excellent suppression of EMI & RFI and elimination of ground loop

- Adjustment and maintenance free
- No setup but just plug-and-play
- Hot-swappable card modules
- Duplicated LED indicators on the front and rear of the unit for the convenience of observation
- Transient voltage protection on power supply and all signal inputs & outputs
- Robust design for harsh environment applications
- Standalone or card module

Typical Application

FT010DB-SSTRSA   FT010DB-SSRTSA

Data   OT Systems   1 Fiber   OT Systems   Data

Data

FT0X0DB Series

Ordering Information

Model	Description	No. of Fibers (Wavelengths)	Optical Power Budget	Max. Distance
MULTIMODE (62.5/125 um)				
FT010DB-SMTR	1 Data Transceiver			
FT010DB-SMRT	1 Data Transceiver	1 (1310/1550 nm)	23 dB	4 km
FT040DB-SMTR	4 Data Transceiver			
FT040DB-SMRT	4 Data Transceiver			
SINGLEMODE (9/125 um)				
FT010DB-SSTR	1 Data Transceiver			
FT010DB-SSRT	1 Data Transceiver	1 (1310/1550 nm)	17 dB	40 km
FT040DB-SSTR	4 Data Transceiver			
FT040DB-SSRT	4 Data Transceiver			
FT010DB-SSTRL	1 Data Transceiver			
FT010DB-SSRTL	1 Data Transceiver	1 (1310/1550 nm)	24 dB	60 km
FT040DB-SSTRL	4 Data Transceiver			
FT040DB-SSRTL	4 Data Transceiver			

Accessories: FT-C18. 19" rack mount chassis (purchased separately) for housing card modules
FT-PA/12V. 12VDC power adapter included for standalone (US, European, UK or Australian power plug)
Options: Model numbers specified above are for Card Modules, please add '*SA*' for Standalone. eg. FT010DB-SMT*SA*
ST type connector is standard. For FC type, specify '*F*' in the model number. Eg. FT010DB-*F*MT

NOTES: (1) Transmission distance will suffer if additional losses are introduced by the optical connectors, fusions, splices and the fibers within the network.
　　　　(2) Operating distance of multimode is limited by the characteristics of the fiber bandwidth.
　　　　(3) Power adaptor is manufactured by third party and is supplied with fitted screw-terminal output cables.
　　　　(4) Please feel free to consult factory for any special requirement and customization

Specifications

Data

No. of Channels:	1 or 4
Data Direction:	Bi-directional
Data Interface:	DIP switch-selectable RS232, RS422, RS485(2 or 4-wire) Tri-state,
Data Format:	MPD (Manchester, Bi-phase, etc)
Data Rate:	0~256Kbps

Connectors

Optical:	ST (standard), FC
Data:	7-pin screw terminal
Power:	SA: 2-pin screw terminal
	Card: Futurebus connector

Electrical and Mechanical

Power:	SA: 12VDC @ 3.0W
	Card: From FT-C18 chassis
Dimensions (HxWxD):	SA: 30(50*) x 156 x 212mm
	Card: 154 x 20.4(41*) x 212mm
Weight:	SA: 0.65(0.92*)kg
	Card type: 0.2(0.4*)kg
No. of rack slots:	1(2*)
LED Indicators:	Power, Optical carrier detected, Data Tx & Rx

*Specifications of FT040DB

Environmental

Operating Temp.:	-40℃ to +75℃
Storage Temp.:	-40℃ to +85℃
Relative Humidity:	0 to 95% non-condensing
MTBF:	> 100,000 hours

ISO 9001:2000
FM 88638

OT Systems Ltd., February 2009.
Due to continuous improvement, all product specifications are subject to change without further notice.