

FT010DB / FT040DB

Serial Data Transceivers



RS232	1
RS422	~
RS485	4
DATA	↔

Features

Data

- ▶ Meets EIA RS-232/422/485 specifications
- ▶ Full RS-485 Tri-state support
- ▶ Half or full-duplex operation
- ▶ Transparent to data encoding
- ▶ Data rates from 0 to 256kbps

Optical

- ▶ One fiber design
- ▶ High performance laser-based optics
- ▶ Multimode or Singlemode
- ▶ ST or FC connectors available

Robust Design

- ▶ Plug-and-Play design, no in-field adjustments required.
- ▶ Hot-swappable design
- ▶ Wide operating temperature range of -40°C to +75°C
- ▶ Designed for use in harsh environments

Warranty

- ▶ Comprehensive Lifetime Warranty

Description

OT Systems FT010DB/FT040DB data series offers a plug-and-play solution that provides instant product compatibility for EIA compliant serial interface equipment and reliability in harsh environments, a perfect compliment to any commercial, government or intelligent transportation application. The FT010DB/FT040DB transmits up to 4-channels of bi-directional serial data.

The Data Series offers compatibility for the three most common data sources and does not require the input and output data interfaces to be the same. Compatible data interfaces include EIA RS-232, RS-422 and (2- or 4- wire) RS-485 with tri-state, data interfaces and are transparent to data protocol.

The product features in card module or standalone type.

Typical Application



Specifications

Data

Number of Channels	1 / 4
Data Direction	Bi-directional
Data Interface	RS232, RS422, RS485 2 or 4-wire Tri-state
Selection Method	DIP switch-selectable
Data Rate	0~256kbps
Data Format	MPD (Manchester, Bi-phase, etc)

LED

Data In / Out	Red/Green LED lit
Optical Carrier Detected	Yellow / Active
Power	Red/On

Connectors

Data Input / Output	7-pin screw terminals
Optical Input / Output	ST (standard), FC (optional)
Power (Standalone)	2-pin screw terminal block
Power (Rack-Mount)	Bus connector

Electrical and Mechanical

FT010DB

Power (Standalone)	12VDC @ 3.6W
Power (Rack Mount)	From FT-C18 Chassis
Dimensions(WxHxD) (Standalone)	156 x 30.5 x 223mm(Max)
Dimensions(WxHxD) (Rack Mount)	148 x 20.4 x 213mm(Max)
Shipping Weight (Standalone)	0.6kg
Shipping Weight (Rack Mount)	0.16kg

FT040DB

Power (Standalone)	12VDC @ 3.6W
Power (Rack Mount)	From FT-C18 Chassis
Dimensions(WxHxD) (Standalone)	156 x 50.5 x 223mm(Max)
Dimensions(WxHxD) (Rack Mount)	148 x 41.4 x 213mm(Max)
Shipping Weight (Standalone)	0.78kg
Shipping Weight (Rack Mount)	0.28kg

Environmental

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

Ordering Information

Fiber Type	Part Number	Description	Wavelengths (nm)	Optical Power Budget (dB)	Max. Distance (Km)	No. of slots
Multi-mode (62.5/125µm)	FT010DB-SMTR	1-ch bidirectional Data Transceiver	1310 1550	23	4	1
	FT010DB-SMRT	1-ch bidirectional Data Transceiver				
	FT040DB-SMTR	4-ch bidirectional Data Transceiver	1310 1550	23	4	2
	FT040DB-SMRT	4-ch bidirectional Data Transceiver				
Single-mode (9/125µm)	FT010DB-SSTR	1-ch bidirectional Data Transceiver	1310 1550	17	20	1
	FT010DB-SSRT	1-ch bidirectional Data Transceiver				
	FT040DB-SSTR	4-ch bidirectional Data Transceiver	1310 1550	17	20	2
	FT040DB-SSRT	4-ch bidirectional Data Transceiver				

- Options
- ST type connector is standard. For FC type, specify "F" in the suffix. E.g. FMTR.
 - For Standalone type, please add "SA". E.g. SMTRSA
 - Please feel free to consult factory if longer transmission distance is required.
- Power Adaptor
- Power adaptor is included in Standalone type only.
- Rack Mount Chassis
- FT-C18 is to be purchased separately. Please refer to accessories section for the details.

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



OT Systems Ltd., June 2013

Due to continuous improvement, all product specifications are subject to change without further notice.