

HFD-FO-485 Series

RS485 Self-healing Ring Fiber Optic Modem



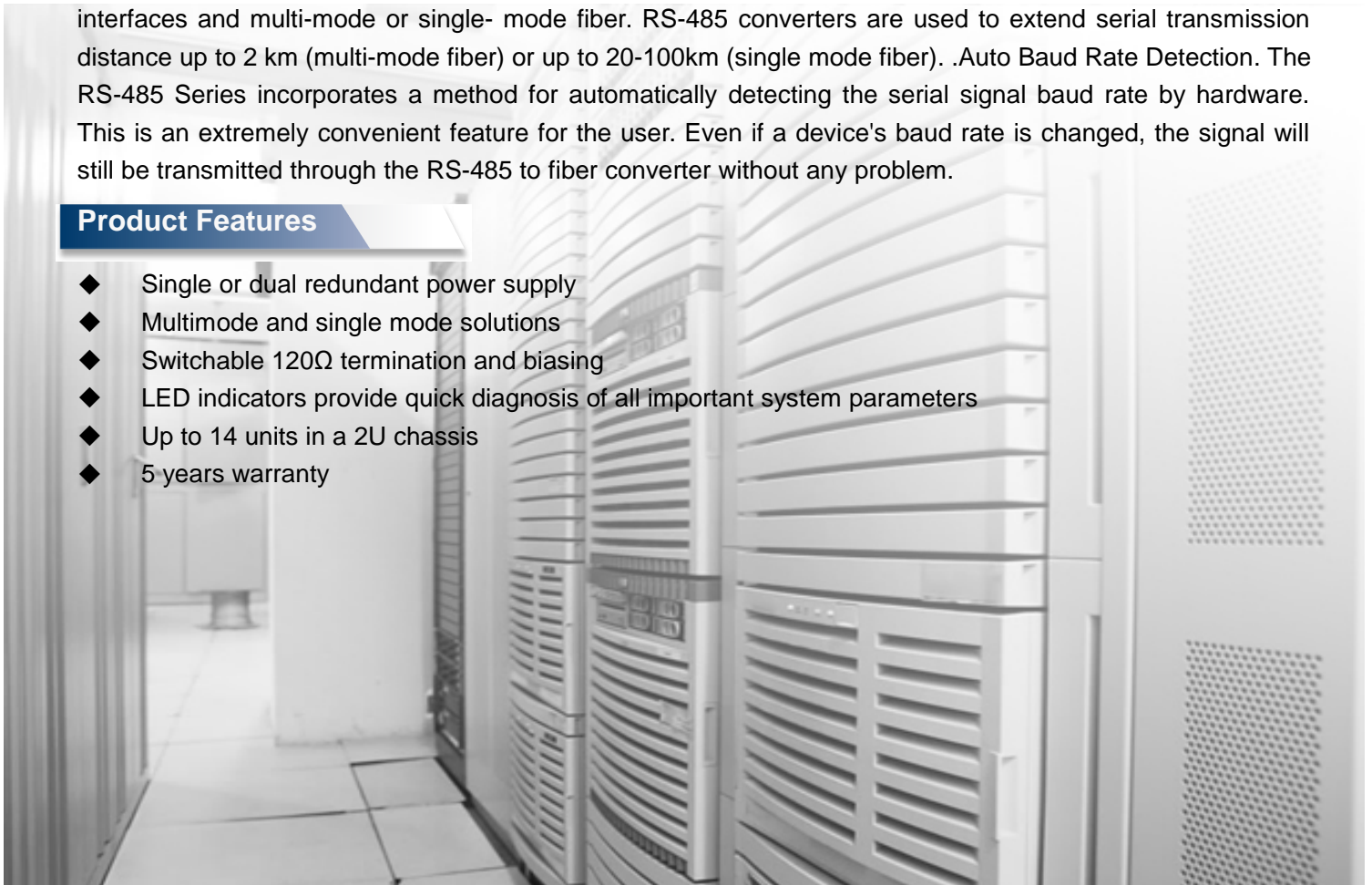
Product Description

The HFD series RS-485 Fiber Optic Converter data series uses the most advanced digital technologies to provide excellent repeatable performance for today's data systems. It supports transmission of one bi-directional data channel over one multimode or single mode optical fiber. RS232, RS422 and RS485 (2 wire & 4 wire) standards are fully supported. The plug-and-play design ensures ease of installation with no electrical or optical adjustment needed. LED indicators are provided to show the operational status of the unit clearly. The series is available in compact wall mount or 2U chassis card.

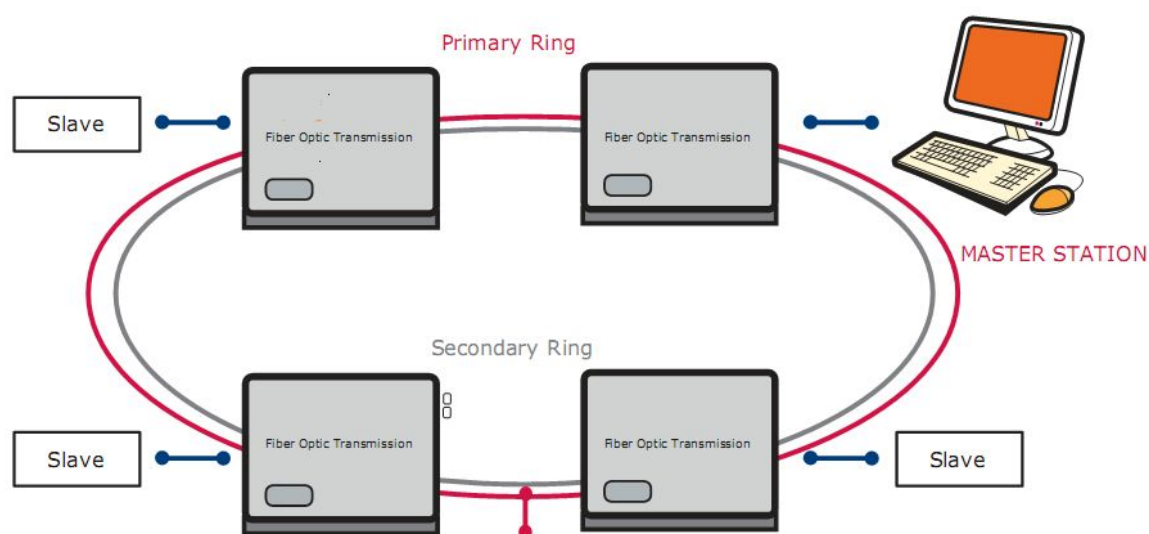
The HFD RS-485 Series converter is equipped with a multiple interface circuit that can handle RS-485 serial interfaces and multi-mode or single-mode fiber. RS-485 converters are used to extend serial transmission distance up to 2 km (multi-mode fiber) or up to 20-100km (single mode fiber). Auto Baud Rate Detection. The RS-485 Series incorporates a method for automatically detecting the serial signal baud rate by hardware. This is an extremely convenient feature for the user. Even if a device's baud rate is changed, the signal will still be transmitted through the RS-485 to fiber converter without any problem.

Product Features

- ◆ Single or dual redundant power supply
- ◆ Multimode and single mode solutions
- ◆ Switchable 120Ω termination and biasing
- ◆ LED indicators provide quick diagnosis of all important system parameters
- ◆ Up to 14 units in a 2U chassis
- ◆ 5 years warranty



Typical System Configuration



If primary fiber is lost, data is passed onto the Secondary ring to maintain the ring integrity

— Data Cable (depends on data type)
— Multimode or singlemode fiber

Specifications:

Data	
Data Formats	RS232, RS422, RS485
RS232 Data Rate	115.2kbps
RS422/485 Data Rate	512kbps
Bit Error Rate	$<1 \times 10^{-12}$
Connectors	
Data	Screw Block Terminal
Fiber	ST, SC or FC (ST fitted as standard)
Environmental	
Operating Temperature	-30C---+70C
Storage Temperature	-40C---+90C
Operating Humidity	0-95%
MTBF	>100,000 Hours
Optical	
Fiber	Multi mode or Single mode
Wavelength	MM:850nm, SM:1310nm
Number of fibers	2 or 1(WDM, Bi-Di)
Power	
Power Input	AC 220V 110v or DC+110V +5V +12V +24V +48V Option
Mechanical	
Dimensions	40(W)×120(H)×90(D)mm DIN Rail

Model Selection:

Model Number	Description	Fiber No.	Fiber Mode	Fiber Connector
HFD-FO-485-R2M	Redundant Ring Link,Dual Fiber(BI-DI), 2km	2	Multi Mode	ST/SC/FC
HFD-FO-485-R4M	Redundant Ring Link,4 Fiber, 2km	4	Multi Mode	ST/SC/FC
HFD-FO-485-R2S	Redundant Ring,Dual Fiber(BI-DI), 20km	2	Single Mode	ST/SC/FC
HFD-FO-485-R4S	Redundant Ring,4 Fiber, 20km	4	Single Mode	ST/SC/FC

