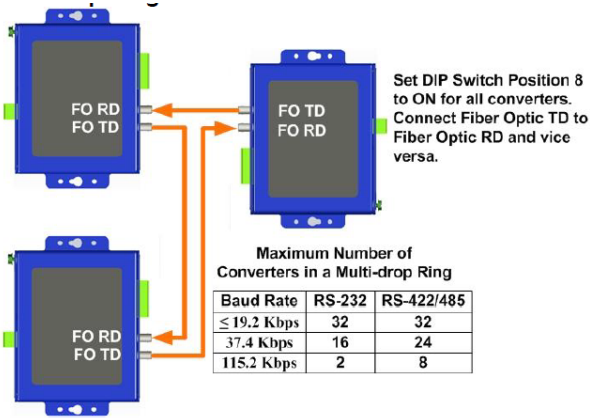


Multi-drop Ring



Maximum Number of Converters in a Multi-drop Ring

Baud Rate	RS-232	RS-422/485
≤ 19.2 Kbps	32	32
37.4 Kbps	16	24
115.2 Kbps	2	8

Model Number	Connector	Fiber Type	Range	Size
FOSTCDRi-PH-MT	ST	MM	2 km	62.5/125 μm
FOSTCDRi-PH-MC	SC	MM	2 km	62.5/125 μm
FOSTCDRi-PH-SC	SC	SM	15 km	9/125 μm

Wavelength = 1310 nm

5 | UL Class 1 Div. 2 Information

SUITABLE FOR USE IN CLASS I, DIVISION 2, GROUPS A, B, C AND D HAZARDOUS LOCATIONS, OR NONHAZARDOUS LOCATIONS ONLY.

CONVENANT À L'EMPLOI DANS LES SITES DANGEREUX DE CLASSE I, DIVISION 2, GROUPES A, B, C ET D, OU DANS LES SITES NON HASARDEUX SEULEMENT.

WARNING - EXPLOSION HAZARD - SUBSTITUTION OF ANY COMPONENT MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.

ATTENTION - DANGER D'EXPLOSION - LA SUBSTITUTION DE COMPOSANTS PEUT ENTRAÎNER UNE ADÉQUATION À LA CLASSE I, DIVISION 2.

WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS KNOWN TO BE FREE OF IGNITABLE CONCENTRATIONS.

ATTENTION - DANGER D'EXPLOSION - LA SUBSTITUTION DE COMPOSANTS PEUT ENTRAÎNER UNE ADÉQUATION À LA CLASSE I, DIVISION 2.

Document Number: 710-10863-00_r2_FOSTCDRi-PH-xx_2118qsg

Field wiring connections must be made using 105 °C minimum copper supply wires.

Les connexions de câblage sur site doivent être réalisées en utilisant des câbles d'alimentation en cuivre de 105 °C minimum.

To be installed in accordance with control drawing 8510r001.

Pour être installé conformément au dessin de contrôle 8510r001.

QUICK START GUIDE



Models FOSTCDRi-PH-MC, FOSTCDRi-PH-MT, FOSTCDRi-PH-SC

3-Way Isolated Serial to Fiber Optic Converter

Before you begin, be sure you have the following:

- + FOSTCDRi-PH-xx Fiber Optic Converter
- + Required but not included:
+ 10 to 48 VDC Power Supply

Recommended Accessories

Industrial Power Supply
Model# MDR-20-24



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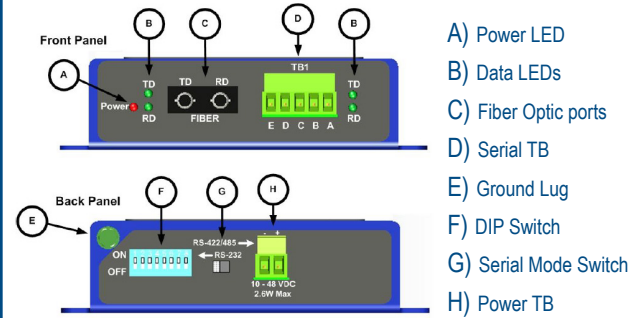
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Product Overview



Terminal	RS-485 2-Wire	RD422/485 4-Wire
A	---	TDA (-)
B	---	TDB (+)
C	DATA A (-)	RDA (-)
D	DATA B (+)	RDB (+)
E	Ground	Ground

Terminal	Signal	Direction
A	RD	Output
B	---	---
C	TD	Input
D	---	---
E	Ground	---

Built-in Termination Resistor	5
Use the 120Ω Built-in Termination	ON
Use External or No Termination	OFF

Built-in Transmit Bias Resistor	6
Use the External or No Bias Resistor	ON
Use the 1.2KΩ Transmit Bias Resistor	OFF

Built-in Receive Bias Resistor	7
Use the External or No Bias Resistor	ON
Use the 1.2KΩ Receive Bias Resistor	OFF

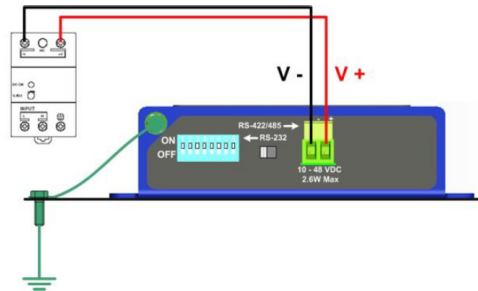
Fiber Optic Mode	8
Multi-drop Ring	ON
Point-to-point	OFF

+ For an explanation of RS-485 termination requirements, more documentation can be found at advantech-bb.com

1 Configuration DIP Switch

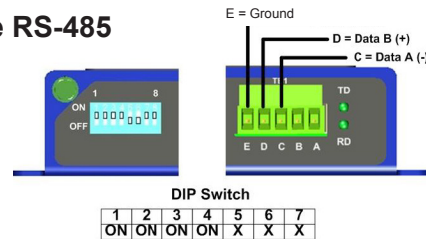
	1	2	3	4
RS-485 2-Wire Half Duplex	ON	ON	ON	ON
RS-485 4-Wire Full Duplex	ON	OFF	OFF	OFF
RS-422 Full Duplex	OFF	OFF	OFF	OFF

2 Power & Ground Connection



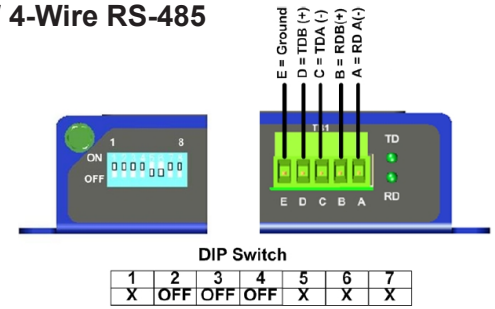
3 Wiring Examples

2-Wire RS-485



Positions 5, 6, 7 are used for termination and biasing. Position 8 is used for fiber optic point-to-point or multi-drop ring.

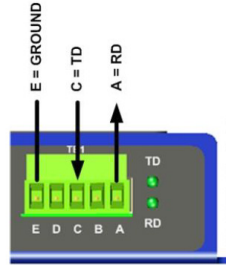
RS-422/ 4-Wire RS-485



Position 1 = ON for RS-485, OFF for RS-422. Positions 5, 6, 7 are used for termination and biasing. Position 8 is used for fiber optic point-to-point or multi-drop ring

RS-232

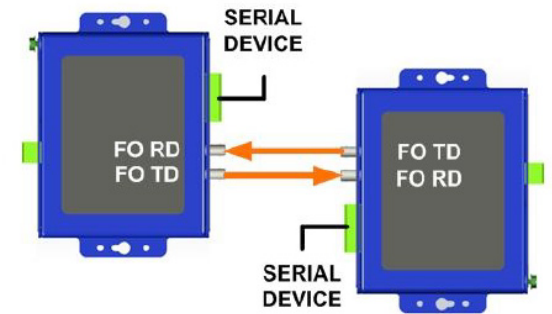
DIP Switch positions 1 through 7 have no effect in RS-232 mode. Set position 8 to OFF for fiber optic point-to-point or multi-drop ring.



4 Fiber Optic Connections

+ Note: Your FOSTCDRI-PH-x converter can only connect to another FOSTCDRI-PH-x converter model at the other end of the fiber optic cable.

Point-to-Point



Set DIP Switch position 8 to OFF on both converters. Connect Fiber Optic TD to Fiber Optic RD and vice versa.