

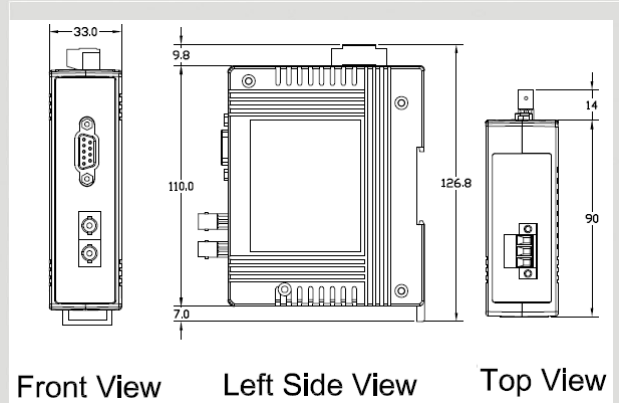


PROFIBUS Series Products

PROFIBUS to Fiber Converter



PROFI-2541 PROFI-2541-SC



Front View Left Side View Top View

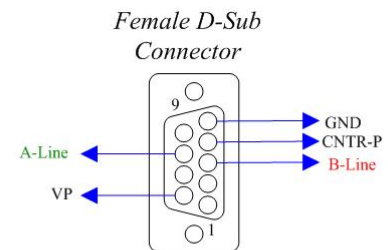
Dimensions

The PROFI-2541 is a PROFIBUS to fiber optic converter which secures PROFIBUS data transmission via fiber optic for providing immunity from EMI/RFI interference. It is used in PROFIBUS applications for transferring PROFIBUS signal from wire to fiber optic and vice versa, and is the perfect solution for applications where transmission must be protected from electrical exposure, surges, lightning or chemical corrosion.

Features

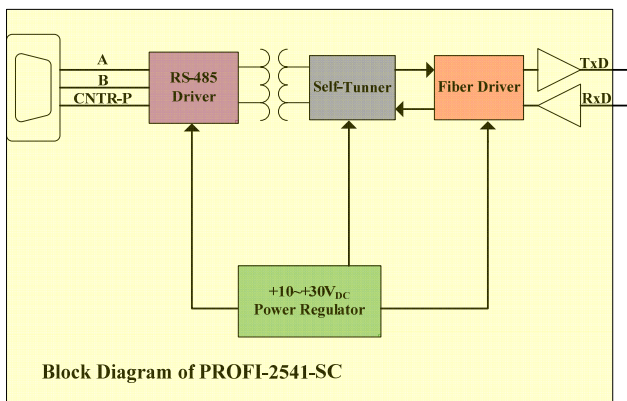
- Protocol : PROFIBUS DP
- Detect transmission rate (9.6 ~ 3000 kbps) automatically
- Max transmission speed up to 3 Mbps for PROFIBUS
- Transparency on both side
- Fiber Port: ST / SC (Multi-mode)
- Wave Length: 850 nm
- Network Isolation Protection: High Speed iCoupler
- 3000 V_{DC} isolation protection on PROFIBUS side
- 4 kV ESD Protection
- Removable terminal block
- Mount easily on DIN-rail

Pin Assignments



Pin No.	Signal	Meaning
3	B-Line	Receive/Transmit data - plus
4	CNTR-P	Repeater control signal, RTS signal
5	GND	Power ground of active terminator
6	VP	Power 5 volt of active terminator
8	A-Line	Receive/Transmit data - minus

Block Diagram



Block Diagram of PROFI-2541-SC

Maximum Cable Length

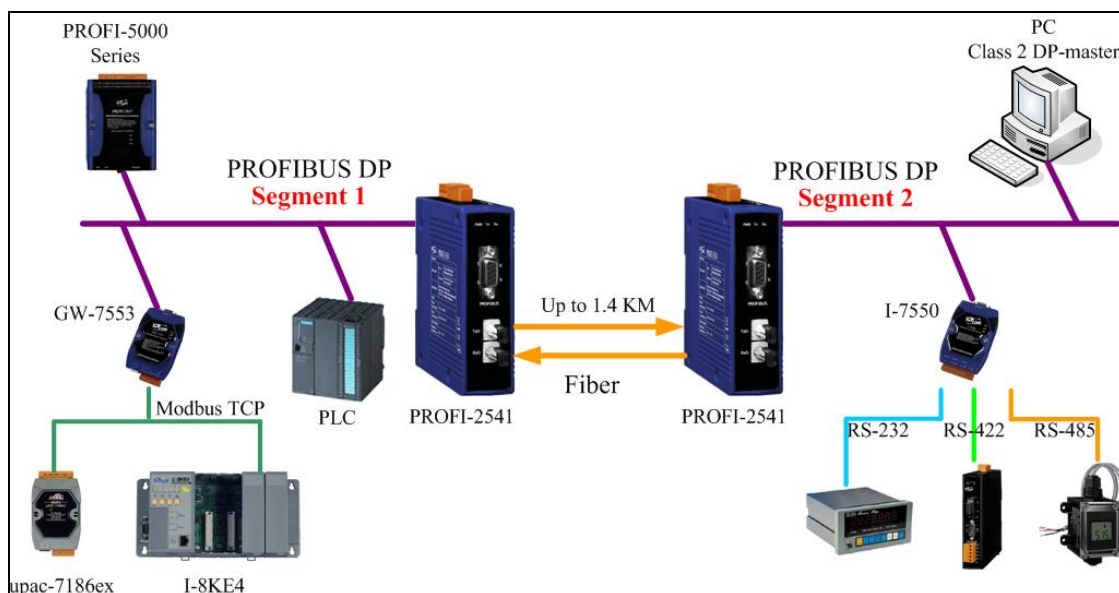
Transmission Rate (bps)	Transmission Distance per Segment (meter)
9.6K ~ 93.75K	1200
187.5K	1000
500K	400
1.5M	200
3M	100



Hardware Specifications

Hardware	
ESD Protection	4 kV class A
PROFIBUS Interface	
Transceiver	ADI ADM2486
Connector	9-pin female D-Sub
Baud Rate (bps)	9.6 k, 19.2 k, 45.45 k, 93.75 k, 187.5 k, 500 k, 1.5 M, 3 M
Transmission Distance (m)	Depend on baud rate (for example, max. 1200 m at 9.6 kbps)
Isolation	3000 V _{DC} for DC-to-DC, 2500 Vrms for bus-to-logic
Fiber Interface	
Connector	ST / SC(Multi-Mode)
Wave Length	850 nm
Fiber Cable	62.5 / 125 μm
Transmission Distance	1.4km max.(in 62.5 / 125 μm fiber cable)
LED	
Round LED	PWR LED, TxD LED, RxD LED
Power	
Power supply	Unregulated +10 ~ +30 V _{DC}
Protection	Power reverse polarity protection, Over-voltage brown-out protection
Power Consumption	1 W
Mechanism	
Installation	DIN-Rail
Dimensions	33mm x 126.8mm x 104.5mm (W x L x H)
Environment	
Operating Temp.	-25 ~ 75 °C
Storage Temp.	-30 ~ 85°C
Humidity	5 ~ 95% RH, non-condensing

Applications



Ordering Information

PROFI-2541 CR	PROFIBUS to Fiber Converter (ST type)
PROFI-2541-SC CR	PROFIBUS to Fiber Converter (SC type)