

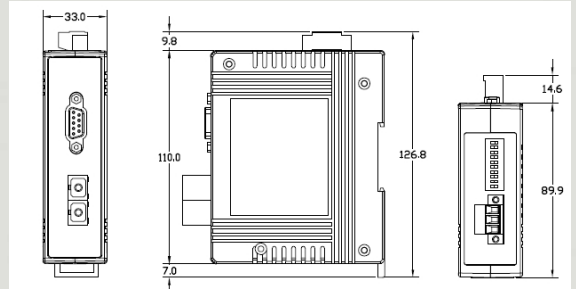


# PROFIBUS Series Products

## PROFIBUS to Fiber Converter



*PROFI-2542-SC*



Front View      Left Side View      Top View

Dimensions

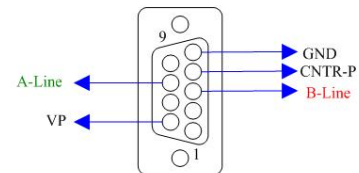
The PROFI-2542-SC is a PROFIBUS to single mode fiber optic converter which secures PROFIBUS data transmission via single mode fiber optic for providing immunity from EMI/RFI interference. It is used in PROFIBUS applications for transferring PROFIBUS signal from wire to single mode fiber optic and vice versa, and is the perfect solution for applications where transmission must be protected from electrical exposure, surges, lighting or chemical corrosion.

### Features

- Protocol : PROFIBUS DP
- Detect transmission rate (9.6 ~ 12000 kbps) automatically
- Max transmission speed up to 12 Mbps for PROFIBUS
- Transparency on both side
- Fiber Port: SC (Single-mode)
- Wave Length: 1310 nm
- Network Isolation Protection: High Speed iCoupler
- 3000 V<sub>DC</sub> isolation protection on PROFIBUS side
- 4 kV ESD Protection
- Removable terminal block
- Mount easily on DIN-rail

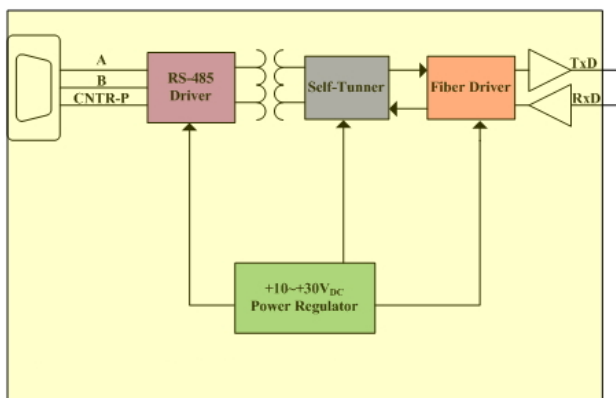
### Pin Assignments

Female D-Sub Connector



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



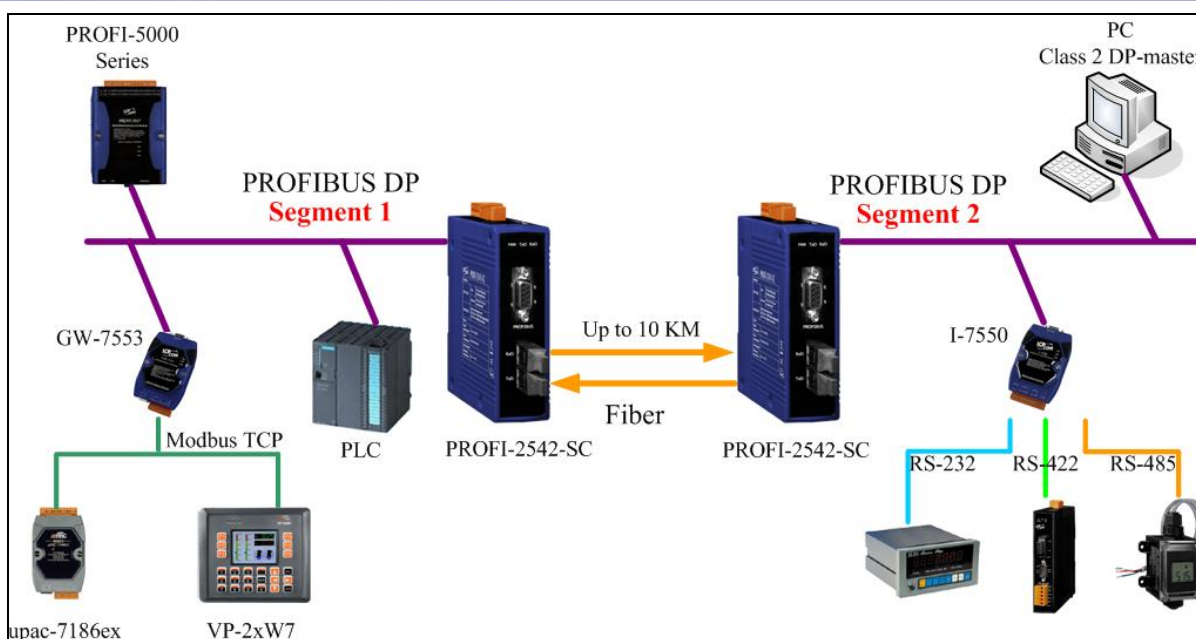
### Maximum Cable Length

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, 6 M, 12 M
Transmission Distance (m)	Depend on baud rate (for example, max. 1200 m at 9.6 kbps )
Isolation	3000 V <sub>DC</sub> for DC-to-DC, 2500 V <sub>rms</sub> for bus-to-logic
Fiber Interface	
Connector	SC type ; Single mode ; 100 Base-FX
Wave Length	1310 nm
Fiber Cable	9/125um recommended
Transmission Distance	10 KM(indicative only)
LED	
Round LED	PWR LED, TxD LED, RxD LED, SD LED
Power	
Power supply	Unregulated +10 ~ +30 V <sub>DC</sub>
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

<b>PROFI-2542-SC CR</b>	PROFIBUS to Single mode Fiber Converter (SC type)
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