

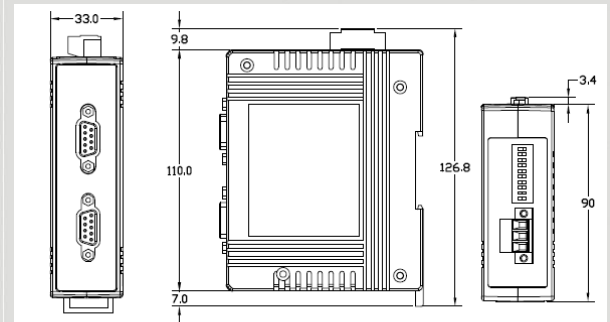


PROFIBUS Series Products

Isolated PROFIBUS Repeater



PROFI-2510



Front View Left Side View Top View

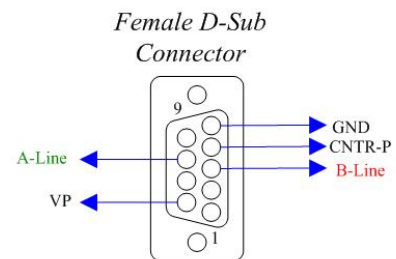
Dimensions

The PROFI-2510 is a PROFIBUS repeater used to establish a physical coupling of two or more segments of a PROFIBUS system. It supports transmission rate of 9.6 Kbps to 12 Mbps and detects the rate automatically. Users can implement bus, star or tree topologies as well as the long drop lines with the PROFI-2510. Users can also extend the transmission of an existing network and increase the maximum number of bus nodes by using PROFI-2510.

Features

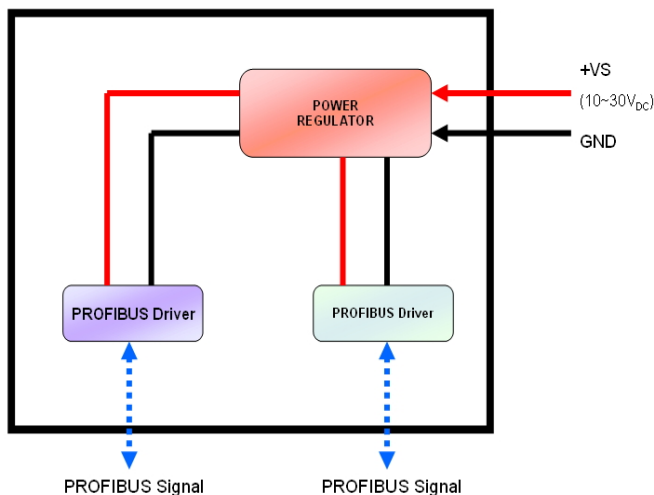
- Protocol : PROFIBUS DP
- Detect transmission rate (9.6 ~ 12000 kbps) automatically
- Max transmission speed up to 12 Mbps for PROFIBUS
- Network Isolation Protection: High Speed iCoupler
- 3000 V_{DC} isolation protection on PROFIBUS side
- 4 kV ESD Protection
- Removable terminal block
- Mount easily 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



Maximum Cable Length

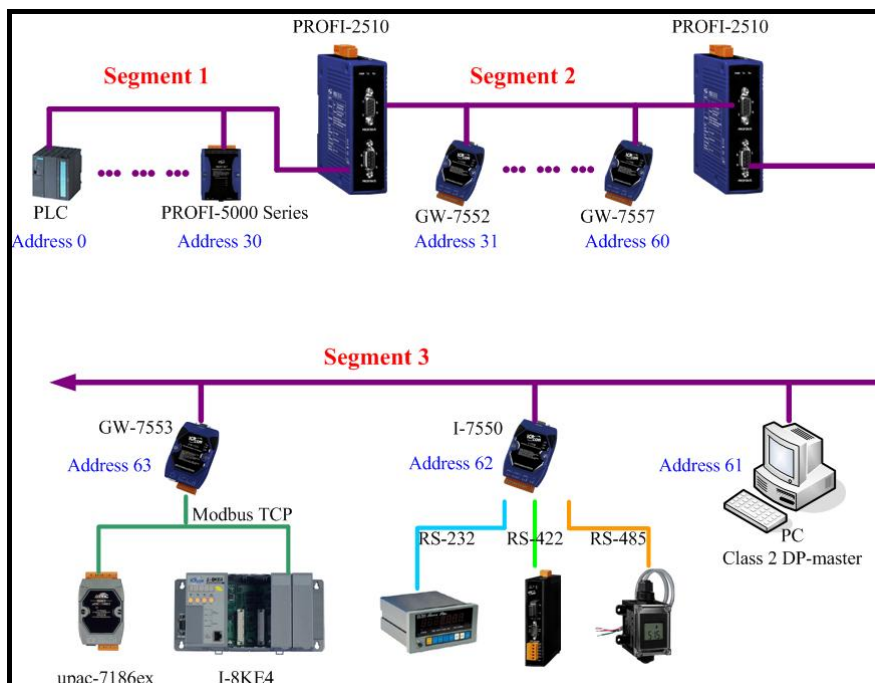
Transmission Rate (bps)	Transmission Distance per Segment (meter)
9.6K ~ 93.75K	1200
187.5K	1000
500K	400
1.5M	200
3M; 6M; 12M	100

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 _{DC} for DC-to-DC, 2500 Vrms for bus-to-logic
LED	
Round LED	PWR LED, DP1 LED, DP2 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 93.4mm (W x L x H)
Environment	
Operating Temp.	-25 ~ 75 °C
Storage Temp.	-30 ~ 85 °C
Humidity	5 ~ 95% RH, non-condensing

Applications

According to the PROFIBUS specification, up to 32 PROFIBUS devices are allowed per segment. The PROFIBUS repeater has not a PROFIBUS address, as show in the below.



Ordering Information

PROFI-2510 CR	Isolated PROFIBUS Repeater (RoHS)
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