PROFI-25xx Module Quick Start

v1.3, Dec 2017

What's in the box?

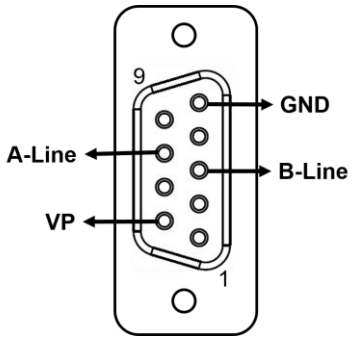
In addition to this guide, the package includes the following items:

PROFI-25xx

CD

- PROFI-25xx User Manual:
  - CD:\Profibus\converter\
  - http:/ftp.icpdas.com/pub/cd/fieldbus_cd/profibus/converter/

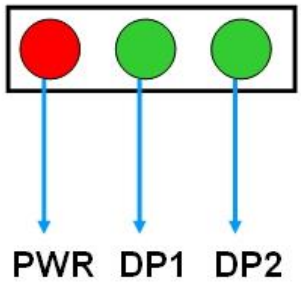
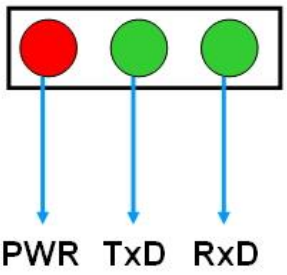
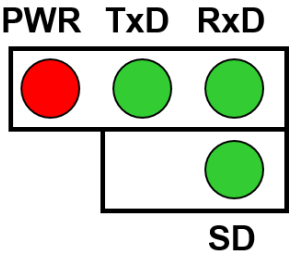
1 PROFIBUS Connector



Pin No.	Signal	Meaning
3	B-Line	Receive/Transmit data – plus
5	GND	Power ground of active terminator
6	VP	Power 5 volt of active terminator
8	A-Line	Receive/Transmit data - minus

The PROFIBUS connector is a standard 9-pin D-Sub connector, there are only 4 pins used in PROFI-25xx module. The pins VP and GND support the 5 volt power to active terminal resistor, and the A-Line and B-Line is the data bus.

2 Status Indicator

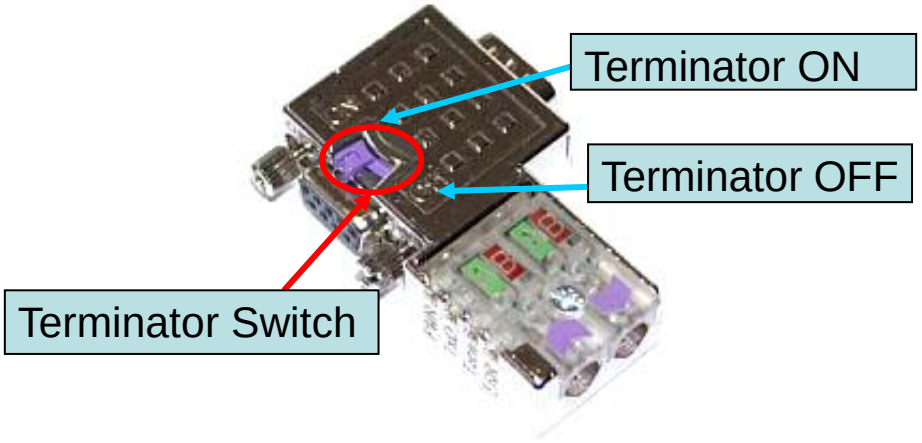
PROFI-2510	PROFI-2541(SC)	PROFI-2542(SC)
		

It provides three status indicators,

		PROFI-2510	PROFI-2541(SC)	PRPOFI-2542(SC)
PWR (Red)	ON	Module Active		
	OFF	Module Inactive		
DP1 (Green)	Flashing	Data Transmitting	N/A	
	OFF	No Data Transmitting	N/A	
DP2 (Green)	Flashing	Data Transmitting	N/A	
	OFF	No Data Transmitting	N/A	
TxD (Green)	Flashing	N/A	Data Transmitting	
	OFF	N/A	No Data Transmitting	
RxD (Green)	Flashing	N/A	Data Transmitting	
	OFF	N/A	No Data Transmitting	
SD (Green)	ON	N/A		Fiber Signal Detected
	OFF	N/A		No Fiber Signal Detected

3 Terminating Resistors

In order to minimize the reflection effect of the signal transmission, PROFIBUS device has to fit with an active terminal resistor at both first node and last node. The connection of active terminating resistors is shown in above circuit diagram. The PROFI-25xx module doesn't have any terminating resistors inside. Therefore, users must add the terminator in external. In general, PROFIBUS connector has terminating resistors inside, and there is a switch to control the ON/OFF of the terminating resistors, as shown below.



4 Dip Switch

Users can set dip switch to get a better PROFIBUS signal quality in PROFI-2542(SC) module.

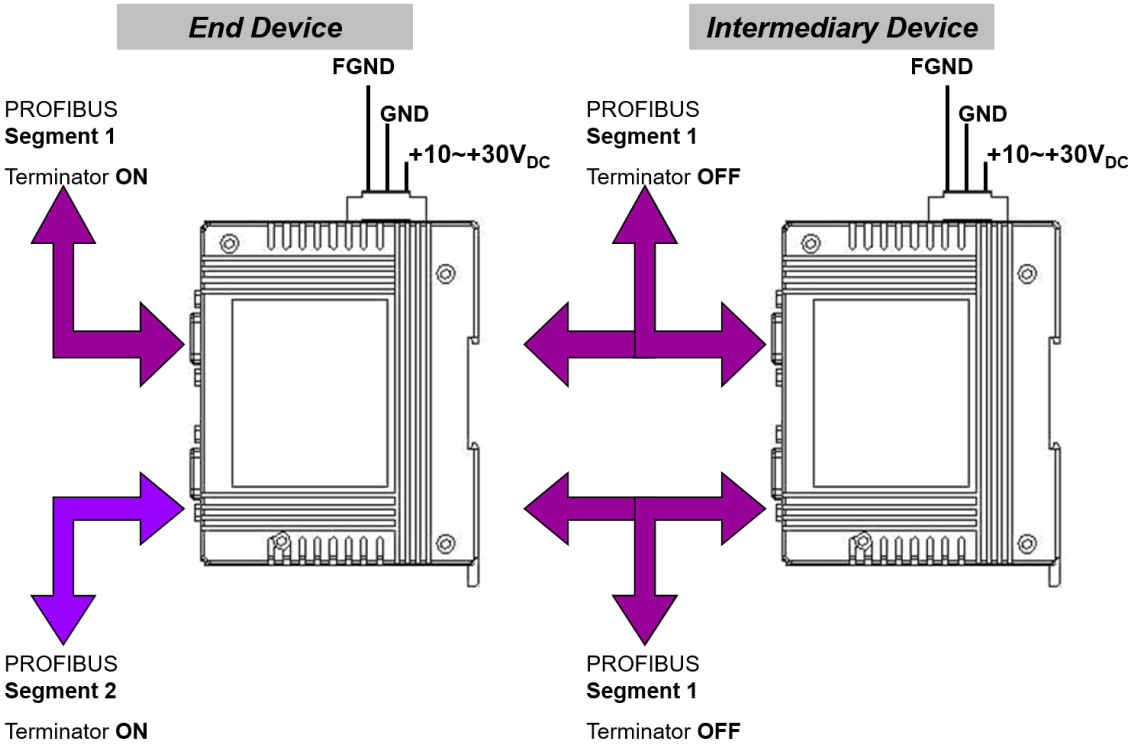
DSW	Baudrate (bps)
ON 1 2 3 4	6M, 12M
ON 1 2 3 4	3M
ON 1 2 3 4	1.5M
ON 1 2 3 4	500K
ON 1 2 3 4	187.5M, 93.75K
ON 1 2 3 4	45.45K
ON 1 2 3 4	19.2K, 9.6K

5 Wire Connections

➢ PROFI-2510

If PROFI-2510 is an end device of PROFIBUS segment 1 and PROFIBUS segment 2. The terminal resistor of segment 1 is ON. The terminal resistor of segment 2 is ON.

If PROFI-2510 is an intermediary device of PROFIBUS segment 1. The terminal resistor of segment 1 is OFF.



➢ PROFI-2541(SC) / PROFI-2542(SC)