# 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:



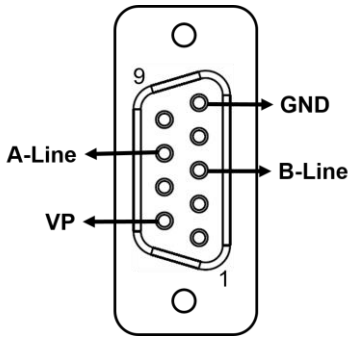
**PROFI-25xx**



**CD**

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

## 1 PROFIBUS Connector



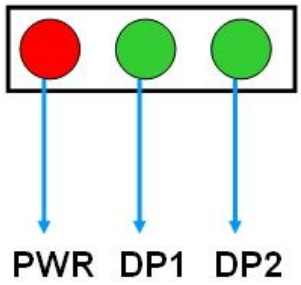
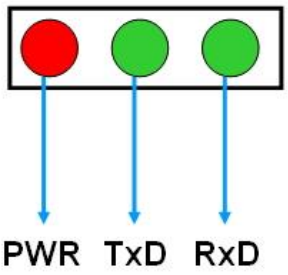
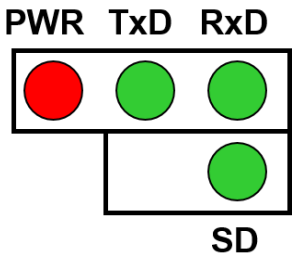

| Pin No. | Signal | Meaning |
|---|---|---|
| 3 | B-Line | Receive/Transmit data – plus |
| 5 | GND | Power ground of active terminator |
| 6 | VP | Power 5 volt of active terminator |
| 8 | A-Line | Receive/Transmit data - minus |

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.



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# 2 Status Indicator

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







It provides three status indicators,

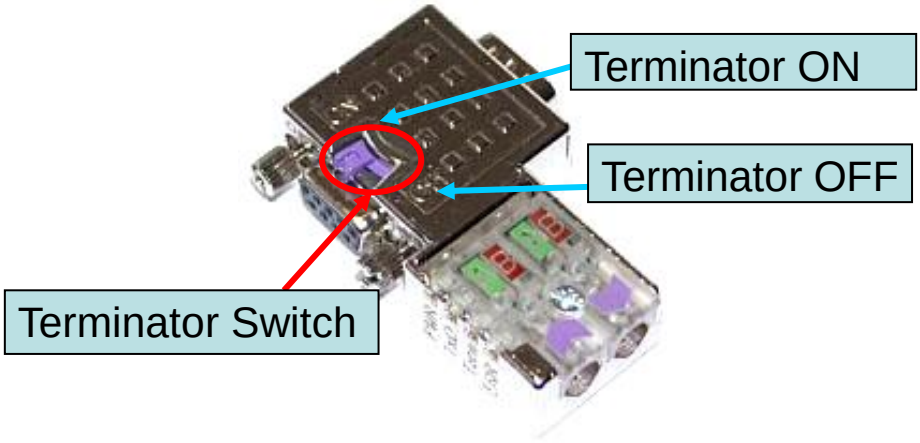
| | | PROFI-2510 | PROFI-2541(SC) | PRPOFI-2542(SC) |
|---|---|---|---|---|
| PWR (Red) | ON | Module Active | | |
| | OFF | Module Inactive | | |
| DP1 (Green) | Flashing | Data Transmitting | N/A | |
| | OFF | No Data Transmitting | N/A | |
| DP2 (Green) | Flashing | Data Transmitting | N/A | |
| | 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 |



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# 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 |



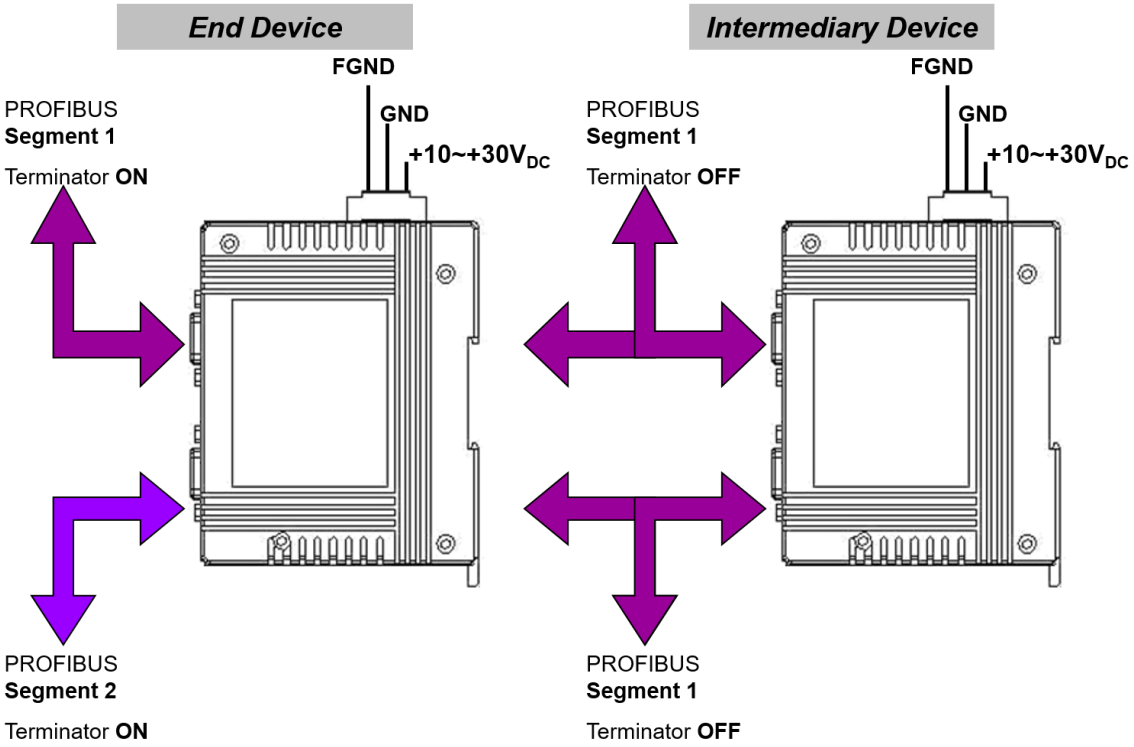
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# 5 Wire Connections

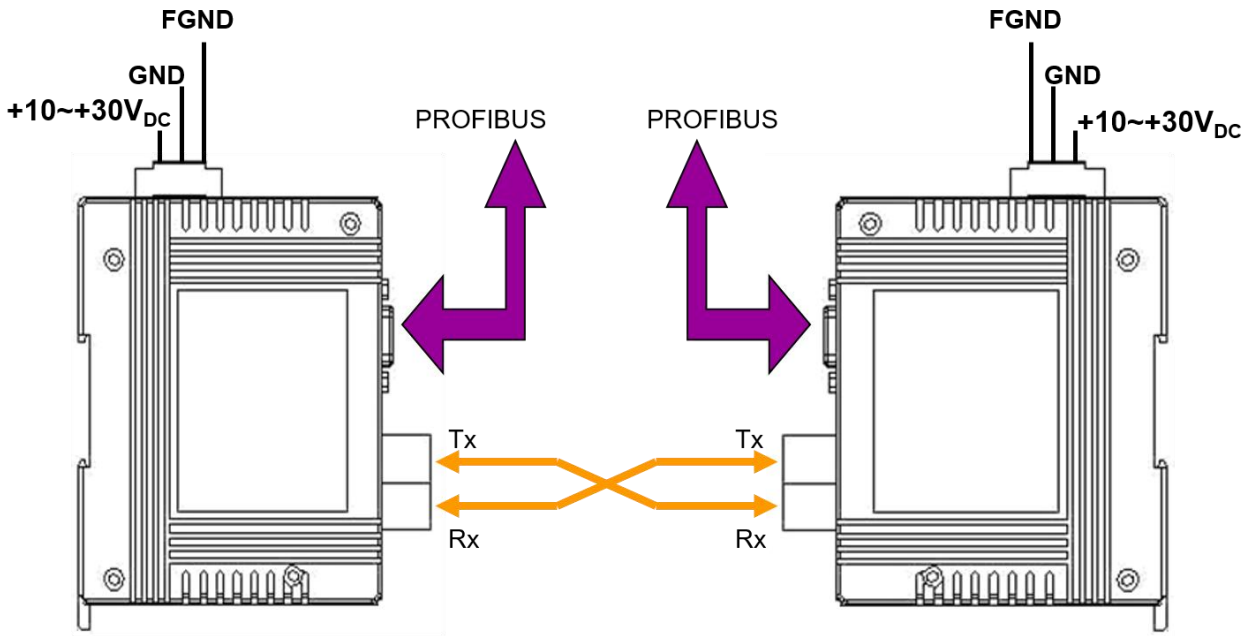
- PROFI-2510

  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)






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