

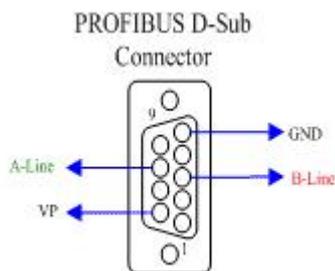
PROFI-2510 / PROFIBUS-2541(SC)

Quick Start User Guide

● Introduction

This user guide introduces the user how to implement the PROFIBUS-2510 / PROFIBUS-2541(SC) into their applications in a quick and easy way. Therefore, it only provides the basic instructions. For more detail information about the PROFIBUS-2510 / PROFIBUS-2541(SC) module, please refer to the PROFIBUS-2510 / PROFIBUS-2541(SC) user manual in the ICP DAS product CD or download it from ICP DAS web site.

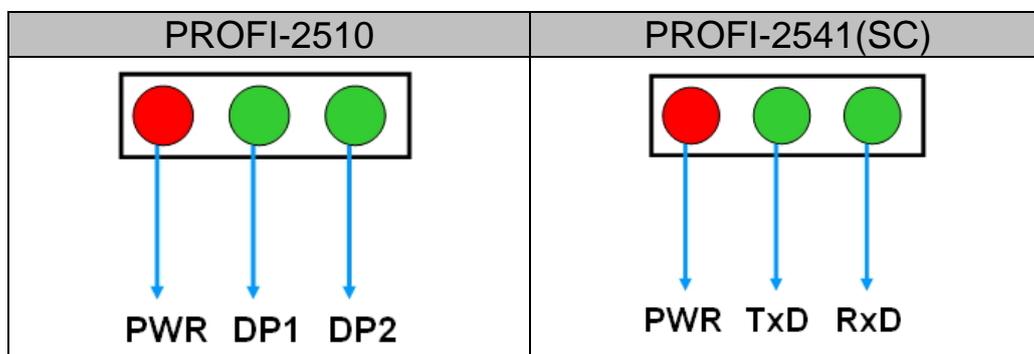
● PROFIBUS Connector



| 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 PROFIBUS-2510 / PROFIBUS-2541(SC). 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.

● Status Indicator

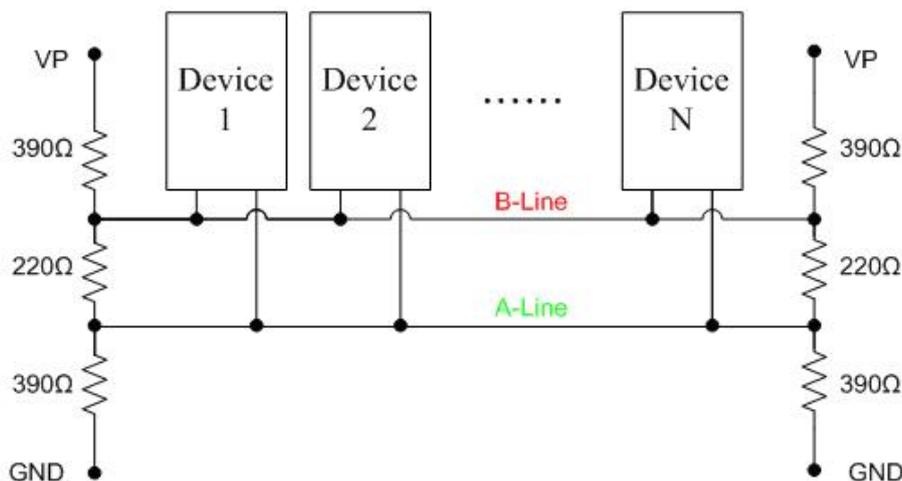


It provides three status indicator, In PROFIBUS-2510, they are PWR LED (red), DP1 LED (green) and DP2 LED (green). In PROFIBUS-2541(SC), they are PWR LED (red), TxD LED (green) and RxD LED (green). When the power is

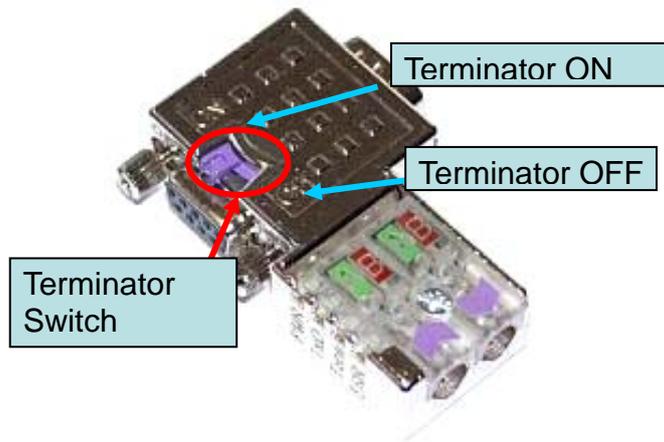
supplied to module, PWR LED will turn on; Transmitting/receiving one data to/from fiber cable will flash the DP1/DP2/TxD/RxD LED once. The DP1/DP2/TxD/RxD LED may always be turned on if there are a lot of datas transmitted on fiber cable.

| PROFI-2510 | | PROFI-2541(SC) | |
|-----------------|----------------------|-----------------|----------------------|
| PWR Led (Red) | | PWR Led (Red) | |
| ON | Module active | ON | Module active |
| OFF | Module inactive | OFF | Module inactive |
| DP1 Led (Green) | | TxD Led (Green) | |
| Flashing | Data transmitting | Flashing | Data transmitting |
| OFF | No data transmitting | OFF | No data transmitting |
| DP2 Led (Green) | | RxD Led (Green) | |
| Flashing | Data transmitting | Flashing | Data transmitting |
| OFF | No data transmitting | OFF | No data transmitting |

● 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-2510 / PROFI-2541(SC) 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.

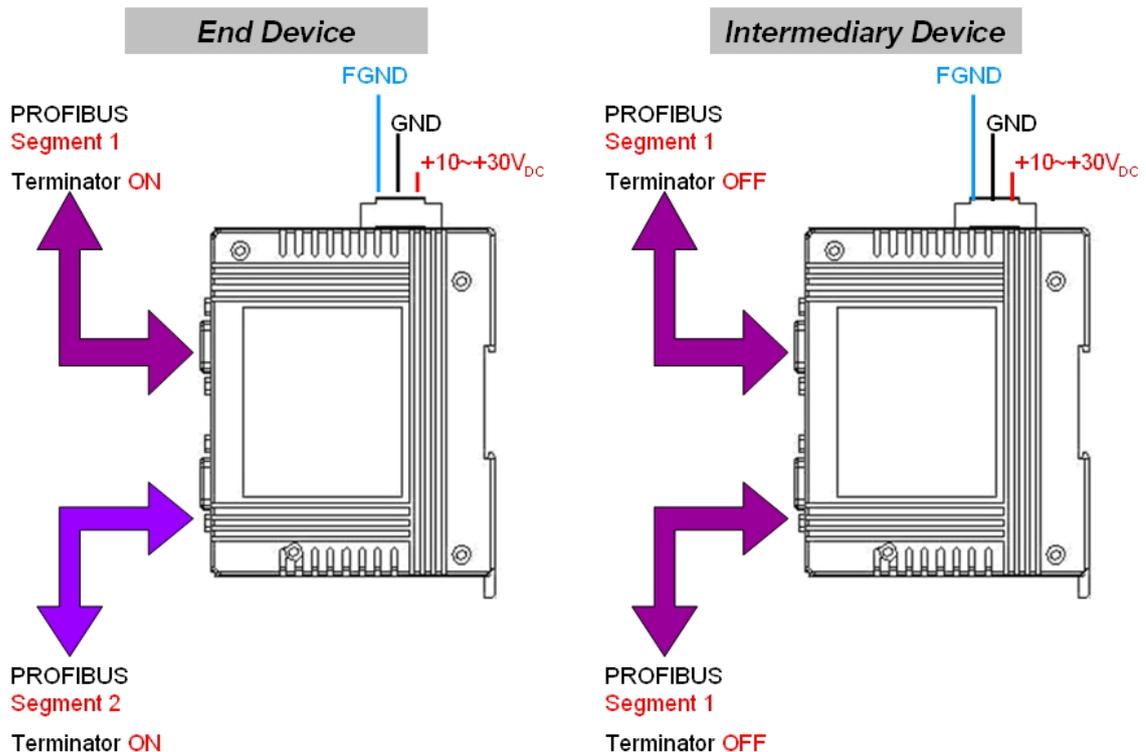


● Wire Connection

➤ PROFI-2510

If PROFI-2510 is a 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)

