

0920 PSL 001 – PROFIBUS-DP/V1 Network Adapter

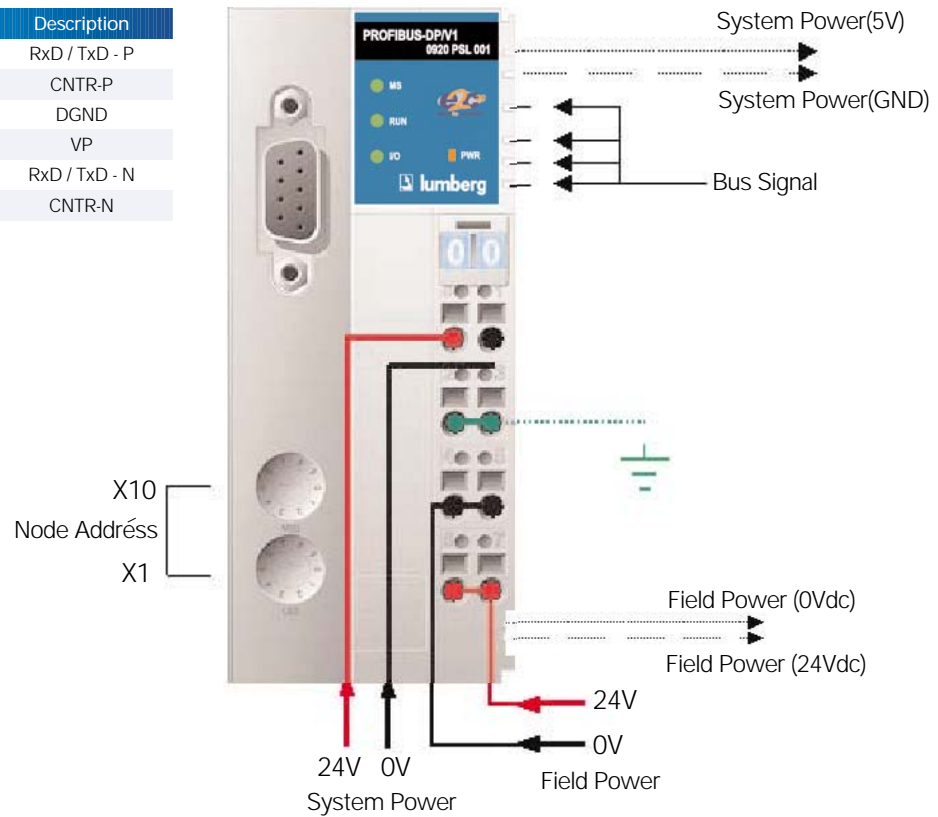


- The 0920 PSL 001 Network Adapter connects the Profibus-DP System to the 9 pin D-sub Connector.
- The 0920 PSL 001 Network Adapter acts as a slave in a master/slave environment.
- that are extended to up to 32 Expansion units for flexibility of node size.
- Each Network Adapter can process a maximum of 1024 digital input and output signals, or 64 analog input and output channels.
- The 0920 PSL 001 Network Adapter has indicators that provide a diagnostic readout (module status, network status, expansion unit status, and field power status).
- PTO conformance tested indicates a verified high level of interoperability with other Profibus products.
- Supports auto baud rate detection up to 12MBaud.
- Set node addresses using rotary switches.

| Item | PROFIBUS Adapter Module |
|---|---|
| Communication Module Interface Specifications | |
| Redundancy | Not supported |
| Repeater Control Signal | RS-485 Signal |
| Freeze mode | Support |
| Sync mode | Support |
| Auto baud rate | Support |
| Fail safe mode | Support |
| Station type | Slave |
| FMS support | Not supported |
| Number of Nodes | 100 Node/Max (Rotary switch# 0-99). |
| Number of Expansion I/O slots | Max. 32 slots |
| I/O Data Size | Total: Input 128bytes / Output 128bytes <ul style="list-style-type: none"> • Max. Discrete I/O: Input 1024points/Output 1024points • Max. Analog I/O: Input 64channels/Output 64channels |
| Indicators | 1 green/red Module Status Indicator 1 green Network Status Indicator 1 green/red Expansion Module Status indicator 1 green Field Power Status indicator |
| Communication Rate | 9.6K-12M(1.2Km-100m) |
| Communication Speed | 9.6 to 12000 Kbps (Auto baud rate selection) |
| Module Location | Starter module - left side of IO system |
| Field Power monitoring | Detect Field Power @11Vdc |
| General Specification | |
| System Power | Supply voltage: 24Vdc nominal Voltage range: 11-28.8Vdc, Protection: Output Current Limit (Min. 1.5A) Reverse polarity protection |
| Power dissipation | 60mA typical @24Vdc |
| Current for I/O module | 1.5A @ 5Vdc maximum |
| Isolation | System power: Non- isolation / System to Logic: Isolation |
| Field Power | Supply voltage: 24Vdc nominal / Voltage range: 11-28.8Vdc |
| Current in jumper contacts | DC 10A max. |
| Weight | 150g |
| Module Size | 42mm x 99mm x 70mm |
| Environment Condition | Refer to '2. Environment Specification' |

PROFIBUS Connector

| Pin No. | Description |
|---------|---------------|
| 3 | RxD / TxD - P |
| 4 | CNTR-P |
| 5 | DGND |
| 6 | VP |
| 8 | RxD / TxD - N |
| 9 | CNTR-N |



Status Indicator LED

Module Status LED

| | | |
|---------------------|-------|--|
| No Power | Off | No power is supplied to the unit. |
| Device Operational | Green | The unit is operating in normal condition. |
| Unrecoverable Fault | Red | The unit has incurred an unrecoverable fault in self-testing. - Invalid Module ID - Firmware fault - Hardware fault |

Network Status LED

| | | |
|--|----------------|---|
| Not Powered baud rate Search mode & No Data exchange mod | Off | Device is in baud rate search mode or may not be powered. |
| No baud rate Search mode & No Data exchange mode | Flashing Green | Device has searched the baud rate and that are parameterized by the master. ; there is no cyclic user data exchange. Wait for Parameter telegram. Parameter fault. Wait for configuration telegram. Configuration fault. |
| Data exchange mode | Green | Device is in cyclic data exchange mode with the parameterization master. |

Expansion Module Status LED(IO)

| State | LED is | To Indicates: |
|--|--------------|---|
| Not Powered No Expansion Module | Off | Device has no expansion module or may not be powered |
| Bus Connection, Run Exchanging IO | Green | Bus in Normal Operation |
| Expansion Configuration Failed | Flashing Red | Failed to initialize expansion module - Detected invalid expansion module ID. - Overflowed Input/Output Size - Too many expansion modules - Initial protocol failure |
| Bus connection fault During exchanging IO | Red | One or more expansion modules active in fault state. - Changed expansion module configuration. - Bus communication failure. |

Field Power Status LED

| State | LED is | To Indicates: |
|--------------------------|--------|---------------------------------|
| Not Supplied Field Power | Off | Not supplied 24V dc field power |
| Supplied Field Power | Green | Supplied 24V dc field power |

Mapping Data into the Image Table

