

PD 667 Profibus DP-V0 Essential Features Master

Features

The PD 667 Profibus DP master interface offers a simple means to utilize Profibus devices within a P-NET control system. This opens the possibility to integrate devices that are only available with a Profibus DP interface, seamlessly into a P-NET system. It uses a **BM 002** base module.

Communication

The PD 667 module contains an RS485 interface for Profibus and a Light-Link interface for P-NET. All data exchange with the Profibus slaves is performed to/from memory arrays in the PD 667. P-NET devices on the network can read or write into these areas and in doing so read data from or send commands to Profibus slaves.



Limitations

The PD 667 implements the essential features of Profibus DP V0 master functionality to enable two-way communication between two fieldbus types. Major limitations are: No multi-master, no token handling procedures, max. 19200 bps, max 8 slaves, no sync and freeze, no slave group, no 5-volt supply for termination.

Configuration

The module itself does not require any programming. Profibus network settings and slave configurations are entered into a table via VIGO. The PD 667 supports (per Profibus slave):

- 0..244 bytes of input
- 0..244 bytes of output
- Full data consistency
- Input and Output slaves / Input only slaves / Output only slaves
- Diagnostic data, automatically and upon request
- Signal for new data / new diagnostic data available
- Protocol status.

The PD 667 is based on the PD 600 module, thus the system channels are identical and the same tools for e.g. Firmware Download and Channel Configuration can be used.

The PD 667 has the following system channels:

| Channel No. | Channel name | Channel description |
|-------------|------------------|----------------------------------------------------|
| 0 | Service | Service channel |
| 1 | RS485Port | Comm. channel, RS485, P-NET mode or Data mode |
| 2 | LightPort | Comm. channel, Light-Link, P-NET mode or Data mode |
| 5 | OpSysCh | Program channel for operating system |
| 6 | PPPProgCh | Program channel for Process-Pascal |

Profibus variables outside channels:

| Software No. | Name | Description |
|--------------|---------------------|---------------------------------------------|
| 400 | DP_Slaves | Configuration, I/O and status of all slaves |
| 401 | DP_Master | Configuration of master and bus |
| 402 | DriverInfo | Status of Profibus driver. |
| 403 | Notification | Common event notification from all slaves |

Specifications

Power supply

| | | |
|------------------|------|--------|
| Power supply DC: | nom. | 24.0 V |
| | min. | 18.0 V |
| | max. | 32.0 V |
| Ripple: | max. | 5% |

Power consumption @ 24Vdc

| | |
|----------------------|--------|
| Operation: | 30 mA |
| Current at power up: | 100 mA |

EMC

EN 61000-6-2, EN 61000-6-3

Vibration

Test method: IEC 60068-2-6

| | |
|------------------------|--------------------------|
| Frequency range: | 2-100 Hz |
| Frequency / amplitude: | 2-10 Hz : +/- 5.0 mm |
| | 10-100 Hz: +/- 2g |
| Sweep rate: | Max. 1 octave/min |
| Number of axes: | 3 mutually perpendicular |

Mechanical Details

