

# Saia PCD3.M6560

## Profibus DP Master, Ethernet – Controller

**Profibus DP is a well known standard as multimaster fieldbus in industrial applications with high baudrates (Up to 12 MBit/s). It allows the use of a mixture of participants from different manufacturers on the same bus. This compact modular PLC comes with integrated Ethernet, RS-232 and all S-Net, S-Web features. SBC offers a full range of external memory too for Backup or data logging.**

### Latest CPU technology

- ▶ Sustainable processor technology with 2 MByte RAM for User Program Memory and 1 MByte SRam as Backup Memory on board
- ▶ Compact PLC in combination with the new Saia PCD® COSinus operating system
- ▶ USB, RS-232, RS-485, Profibus DP-V0 and Ethernet-interface in the base unit. Integrated Web server

### Maximum peripheral connections

- ▶ Up to 1023 central inputs/outputs with expansion module holder
- ▶ Additional remote inputs/outputs via Profi-S-IO with same I/O modules

### PCD3 I/O modules in cassette form

(PCD3.Axxx/ .Exxx/ .Wxxx/ .Bxxx/ .Hxxx)

- ▶ More than 50 I/O modules available with different functionalities
- ▶ Status of digital signals indicated via LEDs
- ▶ Consistent PG5 support in all CPUs and RIOs via FBs and FBoxes

### Efficient SBC programming tools, for more details see TI

PP26-362 or better download software demo version under [www.sbc-support.com/en/product-index/pg5-controls-suite](http://www.sbc-support.com/en/product-index/pg5-controls-suite)

- ▶ PG5 from SBC with integrated DP Network Configurator and comprehensive application components make programming convenient and efficient
- ▶ A coordinating combination of operating system and programming tool achieves maximum speed, reliability and functionality

## General technical data / Operating conditions

### Power supply

Supply voltage (according EN / IEC 61 131-2)	24 VDC -20 / +25%, incl. 5% ripples
Current / Power consumption	typ. 175 mA / 4.2 W, max. 500 mA / 12 W
Load-carrying ability 5 V / 24 V internal	max. 600 mA / 100 mA
Short voltage interruption (according EN / IEC 61 131-2)	≤ 10 ms with interval ≥ 1 s
Watchdog relay closing contact	48 VAC or VDC <sup>1)</sup> , 1 A

### Environmental influences

Storage temperature (according EN / IEC 61 131-2)	-25...+70 °C
Ambient temperature operating (according EN / IEC 61 131-2)	0...+55 °C <sup>2)</sup> or 0...+40 °C (depending on mounting situation)
Relative air humidity (according EN / IEC 61 131-2)	10...95 % r.h., non condensing

### Mechanical data

Type of mounting	Top-hat rail according to DIN EN 60 715 TH35 (formerly DIN EN 50 022) (1 × 35 mm)
Protection level	IP 20
Flame resistance	UL 94 V0
Vibration (according EN / IEC 61 131-2)	0.075 mm / 1.0 g sinusoidally
Shock (according EN / IEC 61 131-2)	15 g / 11 ms sinus half wave

<sup>1)</sup> mount a free-wheeling diode over the load when switching DC tension

<sup>2)</sup> when assembling on vertical surface, all other mounting methods 0...40 °C

## Communication interfaces

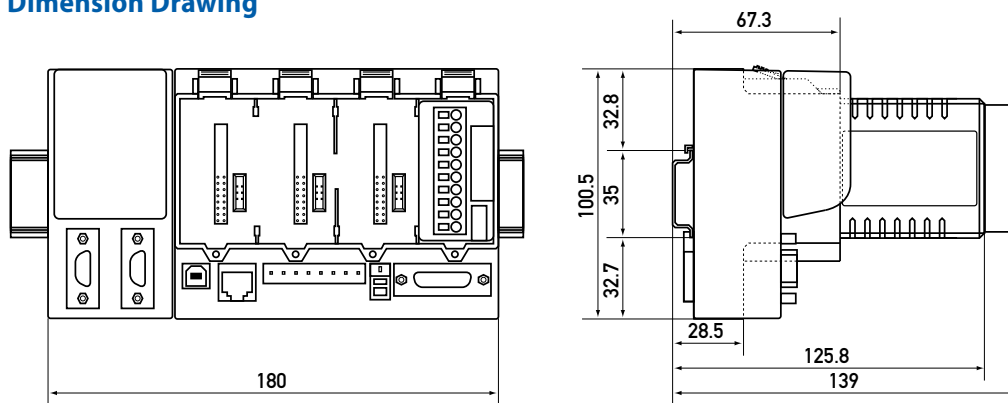
Com / PGU Port #0		Profibus DP (9-pole D-Sub socket) Port #10		
D-Sub Pin	Signal	D-Sub Pin	Signal	Explanation
1	DCD	1	nc	not connected
2	RXD	2	GND*	PCD GND
3	TXD	3	B red	Receive/transmit data positive
4	DTR	4	En	Transmit/receive signal
5	GND	5	GND_BUS	0 V Data communication potential
6	DSR	6	+5V_BUS	5 V Data communication potential
7	RTS	7	+24V*	PCD Supply
8	CTS	8	A green	Receive/transmit data negative
9	nc	9	nc	not connected

\*) Not galvanic isolated signals  
Pins 5 and 6 are for termination only

PCD3.M6560 is a CPU that provide a galvanic isolated high-speed 12 MBit/s Profibus DP-V0 interface. This CPU has the same functions as a PCD3.M5560 CPU except that the S-Net/MPI interface is replaced by DP functionality, for more details see Profibus DP Manual (26-765).

This data sheet only specifies differences. Please refer to existing PCD3 Hardware Manual (26-789) for the whole feature set.

## Dimension Drawing



## Ordering information

Type	Description	Weight
<b>CPU base units for 4 plug-in I/O modules</b>		
PCD3.M6560	PCD3 processor unit with Profibus DP Master and Ethernet TCP/IP, web and FTP server, file system, CPU with 2 MByte user program, 1 MByte SRam extension memory, 128 MByte user Flash memory with file system, USB port for PG5, up to 1024 I/O, 2 interrupt inputs, RS-232, RS-485 for Profi-S-Net/MPI/S-Bus, data protection 1-3 years	820 g

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