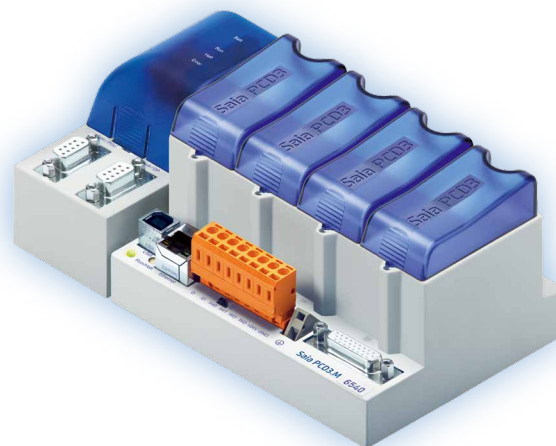


Saia PCD3.M6540 Profibus DP Master, Ethernet – Controller



Profibus DP is a well known standard as multimeter 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 1 MByte RAM for User Program Memory and 1 MByte Flash 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 P-P26/362 or better download software demo version under www.sbc-support.ch/pcd8/pxxx/pcd8p5.htm

- ▶ 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 ¹⁾ , 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 ²⁾ 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

¹⁾ mount a free-wheeling diode over the load when switching DC tension

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

Communication interfaces

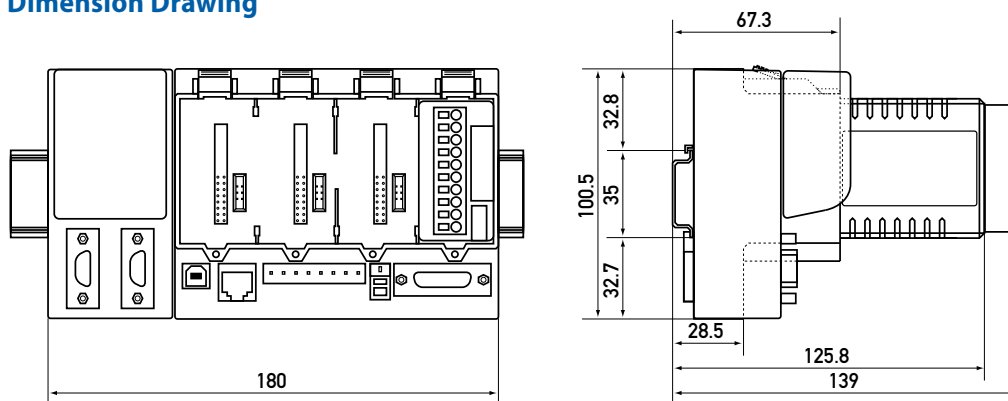
Com / PGU Port #0		Profibus DP (9-pole D-Sub socket) Port #10		
D-Sub Pin	Signal	D-Sub Pin	Signal	Explanation
1	DCD	1	nc	not connected
2	RXD	2	GND*	PCD GND
3	TXD	3	B red	Receive/transmit data positive
4	DTR	4	En	Transmit/receive signal
5	GND	5	GND_BUS	0 V Data communication potential
6	DSR	6	+5V_BUS	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.M6540 /M6440 are CPUs that provide a galvanic isolated high-speed 12 MBit/s Profibus DP-V0 interface. These CPUs have the same functions as PCD3.M5540 /M5440 CPUs 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
	Base unit for 4 I/O-modules	
PCD3.M6440	PLC with 1 MB of user memory with Run/Halt switch Backup option with PCD7.R500 Flash Card, USB port for PG5 max. 1023 digital I/Os, 2 interrupts, Web-Server, RS-232, RS-485 for Profi-S-Net, Profibus DP Master Data protection 1...3 years with lithium battery	580 g
PCD3.M6540	like PCD3.M6440 with Ethernet TCP/IP	600 g

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