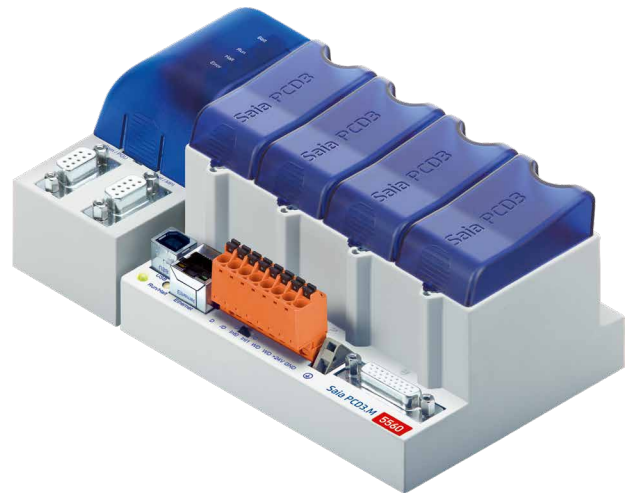# PCD3.M5560

CPU basic module
with Ethernet TCP/IP, 2 MB of program memory, Profibus-DP-Slave

The Saia PCD3.M5 is a high-performance CPU with a modular cassette design.

With its fast processor and high system resources, it can run up to 13 communications interfaces and reliably perform even the most demanding control and communications tasks.

The generous memory resources (up to 4 GB) enable it to record, monitor, archive and control the data and statuses of all system groups.

Automation Server
integrated in the base unit

Technical Data	PCD3.M5360*	PCD3.M5560	PCD3.M6560	PCD3.M6860
	Power	Power DP Slave	Power DP Master	Power 2 × Ethernet
Number of inputs/outputs	1023			
or I/O module slots	64			
I/O expansion connection for PCD3.Cxxx module holder	Yes			
Processing time [µs] bit operation	0.1…0.8 µs			
word operation	0.3 µs			
Real-time clock (RTC)	Yes			

Onboard memory

Program memory, DB/text (flash)	2 MB
User memory, DB/text (RAM)	1 MB
Flash memory (S-RIO, configuration and backup)	128 MB
User flash file system (INTFLASH)	128 MB
Data backup	1…3 years with lithium battery

Onboard interfaces

USB 1.1	Yes			
Ethernet 10/100 Mbits, full-duplex, auto-sensing/auto-crossing	Yes			2×
RS-232 on D-Sub connector (PGU/Port 0)	up to 115 kbits			No
RS-485 on terminal block (Port 2) or RS-485 Profibus-DP Slave, Profi S-Net on terminal block (Port 2)	up to 115 kbits up to 187.5 kbits	up to 115 kbits No	up to 115 kbits up to 187.5 kbits	
RS-485 on D-Sub connector (Port 3)* or Profibus-DP Slave, Profi S-Net on D-Sub connector (Port 10)* or Profibus-DP Master on D-Sub connector (Port 10)*	Up to 115 kbits [1] No No	Up to 115 kbits [2] Up to 1.5 Mbits [2] No	No No up to 12 Mbits [2]	No No No

*   can be used as an alternative
[1]   electrically connected
[2]   electrically isolated

Options

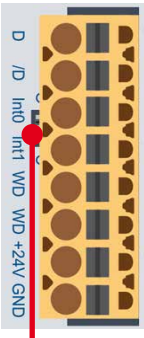The data memory can be expanded to 4 GB with flash memory modules (with file system).

Optional data interfaces

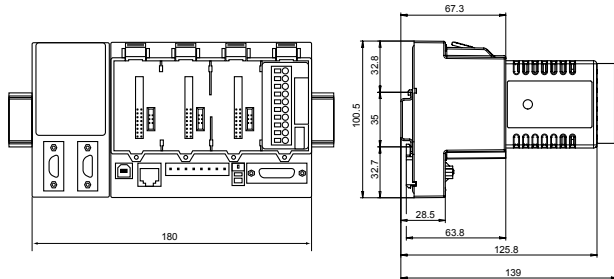|	
I/O slot 0	PCD3.F1xx modules for RS-232, RS-422, RS-485 and Belimo MP-Bus
I/O slot 0…3 up to 4 modules or 8 interfaces:	PCD3.F2xx modules for RS-232, RS-422, RS-485, BACnet® MS/TP, Belimo MP-Bus, DALI and M-Bus

General specifications

Supply voltage (in accordance with EN/IEC 61131-2)	24 VDC, −20/+25% max. incl. 5% ripple or 19 VAC ±15% two-way rectified (18 VDC)
Power consumption	typically 15 W for 64 I/Os
Capacity 5 V/+V (24 V) internal	max. 600 mA/100 mA

Connections

Terminal block (Order number: 4 405 4995 0) for supply, watchdog, interrupt inputs and Port #2				
	Pin	Signal	Explanation	
	1	D	**Port #2** RS-485 up to 115.2 kbit/s usable as free user interface or Profi-S-Bus up to 187.5 kbits/s	
	2	/D		
	3	Int0	2 interrupt inputs 24 VDC or 1 rapid counter 24 VDC	
	4	Int1		
	5	WD	Watchdog	
	6	WD		
	7	+24V	Voltage supply	
	8	GND		

Profibus	
Signal	Wiring
RxD/TxD-N	A green
RxD/TxD-P	B red

RS-485 terminator switch

Switch position	Designation	Explanation
left	O	without termination resistors
right	C	with termination resistors

Dimensions

Details about this CPU can be found in the manual 26-789 ENG "PCD3 series".

I/O modules and I/O terminal blocks may only be plugged in and removed when the Saia PCD® and the external +24 V are disconnected from the power supply.

EAC Mark of Conformity for Machinery Exports to Russia, Kazakhstan or Belarus.

Ordering information

Type	Short description	Description	Weight
PCD3.M5560	CPU basic module with Ethernet TCP/IP, 2 MB of program memory, Profibus-DP-Slave	PCD3 processor unit with 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, clock (RTC), data protection 1-3 years, USB port for PG5, up to 1024 I/O, 2 interrupts, RS-232, 2× RS-485 for Profi-S-Net/MPI/S-Bus	820 g

Accessories

Type	Short description	Description	Weight
4 405 4995 0	8-pin spring terminal block	Pluggable spring block, 8-pin up to 2.5 mm² (orange terminal block), for power supply to PCD3.Mxxx0	12 g
4 507 4817 0	Lithium battery for PCD Base CPU	Lithium battery for PCD processor units (RENATA button type CR 2032)	3 g
4 104 7515 0	Slot cover for unused PCD3 I/O slots	Slot cover for unused PCD3 I/O slots (with SBC logo)	8 g