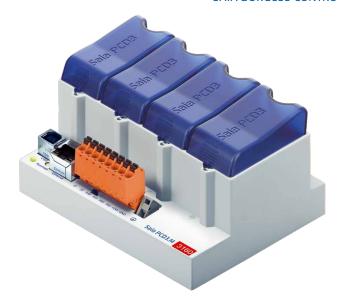
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# PCD3.M3160 Small Controller with Ethernet and Profibus DP Slave

Ethernet as the most popular interface has grown up very fast during the last years due to its connectivity/cabling simplicity/price, speed performance and all the other existing products on the market providing Ethernet for office communication.

The Saia PCD3 controller family has increased with a faster and more powerful version of the CPU PCD3.M3120.



	PCD3.M3120	PCD3.M3330	PCD3.M3160	PCD3.M3360
Technical Data	Basic	Basic	Basic Power	Basic Power
Number of inputs/outputs	64	1023	64	1023
or I/O module slots	4	64	4	64
I/O expansion connection for PCD3.Cxxx module holder	No	Yes	No	Yes
Processing times [µs] bit operation word operation		.1.5 μs 9 μs	0.10.8 μs 0.3 μs	
Real-time clock (RTC)		Υ	Yes	

#### **Onboard memory**

Main memory (RAM) for program and DB/text	128 kByte	512 kByte	No
Program memory, DB/text (FLASH)	No		512 kByte
Working memory, DB/text (RAM)	No		128 kByte
Flash memory (S-RIO, configuration and backup)	2 MByte		128 MByte
User flash file system (INTFLASH)	No 1		128 MByte
Data backup	4 hours with SuperCap		

### **Onboard interfaces**

USB 1.1	Yes
Ethernet 10/100 Mbits, full-duplex, auto-sensing/auto-crossing	Yes
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

#### 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 03 - 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**

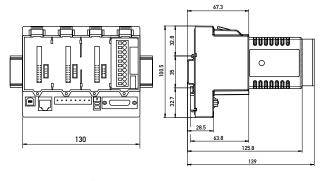
Supply voltage (in accordance with EN/IEC 61131-2)	24 VDC, $-20/+25\%$ max. incl. 5% ripple or 19 VAC $\pm15\%$ two-way rectified (18 VDC)
Power consumption	typically 15 W for 64 I/Os
Capacity 5 V/+V (24 V) internal	max. 600 mA/100 mA

#### **Connections**

Terminal block ( for supply, watc			4 405 4995 0) nputs and Port #2	
	Pin	Signal	Explanation	
D (D Line) att WD WD +24V GND	8	GND	Valtage	
	7	+24V	Voltage supply	
	6	WD	Watehdag	
	5	WD	Watchdog	
	4	Int1	2 interrupt inputs 24 VDC or	
	3	Int0	1 rapid counter 24 VDC	
	2	/D	Port #2 RS-485 up to 115.2 kbit/s usable as free user interface	
	1	D	or Profi-S-Bus up to 187.5 kbits/s	
RS-485 terminator switch				
Switch position	Designation		Explanation	
left		0	without termination resistors	
right		C	with termination resistors	

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

#### **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 $^{\circ}$  and the external +24 V are disconnected from the power supply.



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# **Ordering information**

Туре	Short description	Description	Weight
PCD3.M3160	CPU base units for 4 plug-in I/O modules	PCD3 processor unit with Ethernet TCP/IP, web and FTP server, file system, CPU with 512 KByte user program, 128 MByte user Flash memory with file system, clock (RTC), USB port for PG5, up to 64 I/O, 2 interrupt inputs, RS-485 for Profi-S-Net or S-Bus	640 g

#### **Accessories**

Туре	Short description	Description	Weight
4 405 4995 0	8-pin spring terminal block	Pluggable spring block, 8-pin up to 2.5 mm <sup>2</sup> (orange terminal block), for power supply to PCD3.Mxxx0	12 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

# Saia-Burgess Controls AG

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