

# CX8180 | Embedded PC with Arm<sup>®</sup> Cortex<sup>®</sup>-A9 and RS232/RS485

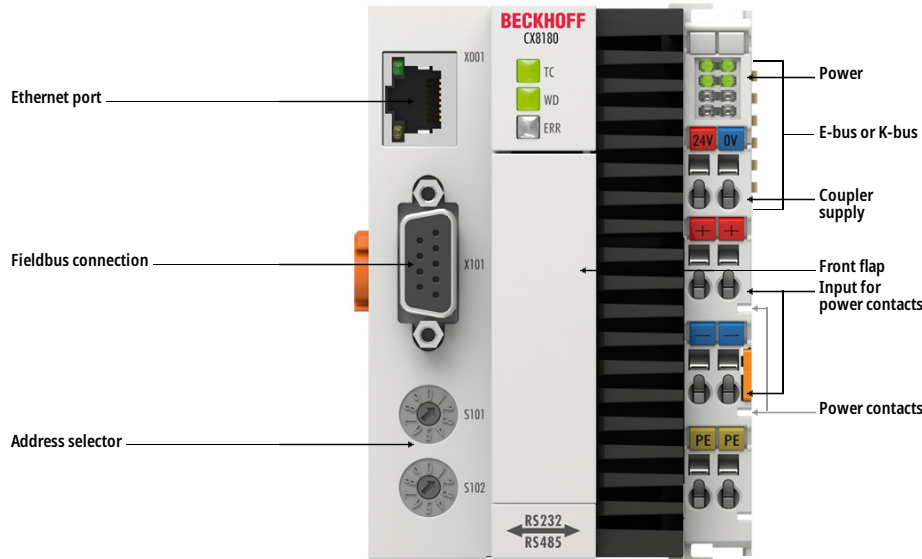
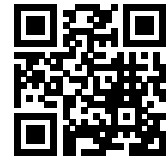


Image similar, may contain optional accessories

**i Product status:** regular delivery

The CX8180 has two serial interfaces: one with RS232 and one with RS485 physics. Both serial interfaces are on the D-sub socket. They are not bound to a particular protocol and can be used with the appropriate TwinCAT 3 functions for different serial communication protocols. E-bus or K-bus terminals can be attached as required; the CX8180 automatically recognizes the type of I/O system connected during the start-up phase. The control system is programmed with TwinCAT 3 via the Ethernet interface. TwinCAT 3 licenses must be ordered via the TwinCAT 3 price list.

Further TwinCAT 3 functions and protocols are available for the CX8180, for example OPC UA, MQTT, Modbus TCP or Modbus RTU. All functions and protocols can be found in the [TwinCAT product finder](#) if you set the filter under TwinCAT 3 platform level to P20.

## Product information

### Technical data

Technical data	CX8180
Processor	Arm <sup>®</sup> Cortex <sup>®</sup> -A9, 800 MHz
Number of cores	1
Flash memory	slot for microSD card, 512 MB included (optionally expandable)
Main memory	512 MB DDR3 RAM (not expandable)

1-second UPS	integrated (1 MB on microSD card)
Interfaces	1 x RJ45 10/100 Mbit/s, 1 x bus interface
Cooling	passive
Bus interface	D-sub socket, 9-pin, 1 x RS232, 1 x RS485
Data transfer rates	300 baud...115 kbaud
Diagnostics LED	1 x TC status, 1 x WD, 1 x error
Clock	internal battery-backed clock for time and date (battery behind the front flap, exchangeable)
Operating system	Windows Embedded Compact 7
Control software	TwinCAT 3 runtime (XAR)
I/O connection	E-bus or K-bus, automatic recognition
Power supply	24 V DC (-15%/+20%)
Current supply E-bus/K-bus	2 A
Max. power consumption	4 W
Max. power consumption (with loading UPS)	9 W
Max. power consumption E-bus/K-bus	10 W (5 V/max. 2 A)
Dimensions (W x H x D)	71 mm x 100 mm x 73 mm
Weight	approx. 230 g
Operating temperature	-25...+60°C
Storage temperature	-40...+85°C
Relative humidity	95%, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protection rating	IP20
Approvals/markings	CE, UL
TwinCAT 3 platform level	Economy (20); please see <a href="#">here</a> for an overview of all the TwinCAT 3 platform level

The end date of the extended support for the operating system Microsoft Windows Embedded Compact 7 has already passed. Up-to-date security updates can no longer be provided. TwinCAT is only supported up to build 4024.

## Options

Options	
CX1900-0123	1 GB microSD card, instead of 512 MB microSD card*
CX1900-0125	2 GB microSD card, instead of 512 MB microSD card*
CX1900-0131	16 GB microSD card, instead of 512 MB microSD card*

\*Only available as flash memory extension in combination with a CX CPU module on order. Suitable for CX7xxx, CX80xx, CX81xx, CX9020.

## Accessories

Accessories	
<a href="#"><u>CX1900-0122</u></a>	512 MB microSD card
<a href="#"><u>CX1900-0124</u></a>	1 GB microSD card
<a href="#"><u>CX1900-0126</u></a>	2 GB microSD card
<a href="#"><u>CX1900-0132</u></a>	16 GB microSD card
<a href="#"><u>ZB3180</u></a>	9-pin D-sub connector for CX8x80/CX7080 (RS232/RS485) with switchable termination resistor
<a href="#"><u>ZK1090-9191-0xxx</u></a>	RJ45, plug, straight, male, 8-pin – RJ45, plug, straight, male, 8-pin
<a href="#"><u>ZK1093-9191-0xxx</u></a>	RJ45, plug, straight, male, 8-pin – RJ45, plug, straight, male, 8-pin
<a href="#"><u>BZ1xxx</u></a>	100 contact labels, various colors, pre-printed
<a href="#"><u>BZ2xxx</u></a>	100 contact labels, various colors, blank