

CX8191 | Embedded PC with Arm® Cortex®-A9 and BACnet/IP

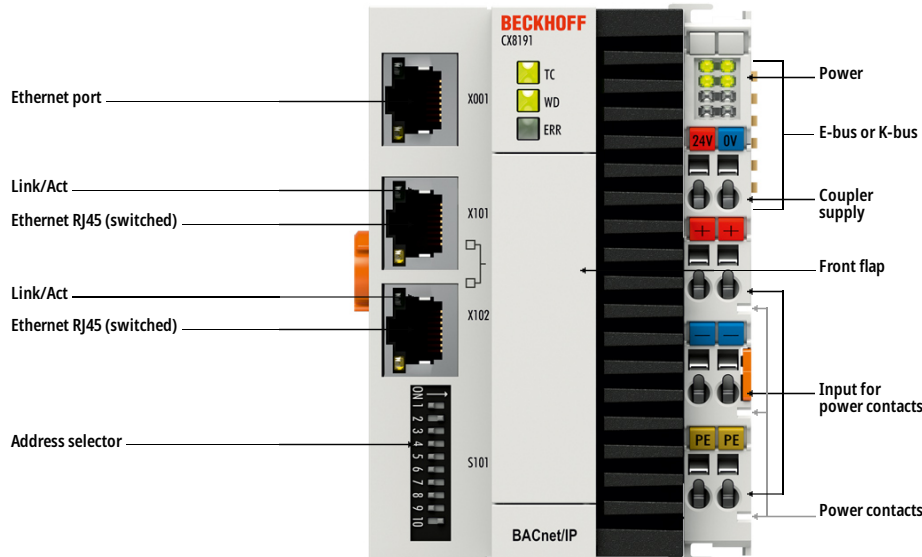
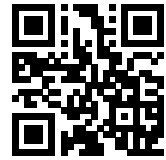


Image similar, may contain optional accessories

i **Product status:** regular delivery

The CX8191 is a control system with a switched Ethernet port. It supports the BACnet protocol. E-bus or K-bus terminals can be attached as required; the CX8191 automatically recognizes the type of I/O system connected during the start-up phase.

The control system is programmed with TwinCAT 3 via the fieldbus interface or the additional Ethernet interface. TwinCAT 3 licenses must be ordered via the TwinCAT 3 price list. The BACnet license is already installed on the device and does not need to be ordered separately.

BACnet (Building Automation Control Network) is a standardized, manufacturer-independent communication protocol for [building automation](#). Areas of application include HVAC, lighting control, safety and fire alarm technology.

In conjunction with the EL6861 BACnet-MS/TP terminals, the CX8191 can act as a router to MS/TP networks including support for several MS/TP networks.

Further TwinCAT 3 functions and protocols are available for the CX8191, 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.

The CX8191 is a virtually universal device that can be used very flexibly, from control tasks through to gateway functions.

Product information

Technical data

Technical data	CX8191
Processor	Arm® Cortex®-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	2 x RJ45 (switched)
Data transfer rates	100 Mbit/s
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 here 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	
<u>CX1900-0122</u>	512 MB microSD card
<u>CX1900-0124</u>	1 GB microSD card
<u>CX1900-0126</u>	2 GB microSD card
<u>CX1900-0132</u>	16 GB microSD card
<u>ZK1090-9191-0xxx</u>	RJ45, plug, straight, male, 8-pin – RJ45, plug, straight, male, 8-pin
<u>ZK1093-9191-0xxx</u>	RJ45, plug, straight, male, 8-pin – RJ45, plug, straight, male, 8-pin
<u>BZ1xxx</u>	100 contact labels, various colors, pre-printed
<u>BZ2xxx</u>	100 contact labels, various colors, blank