Selection table CPUs

	CP1483	CP1484 / CP3484	CP1485 / CP3485	CP1486 / CP3486
Processor	x86 100 comp.	Celeron 266 comp.	Celeron 400	Celeron 650
Fastest task class	1 ms	800 µs	400 µs	200 µs
Cache	L1: 16 KB L2: -	L1: 2x 16 KB L2: -	L1: 2x 16 KB L2: 256 KB	L1: 2x 16 KB L2: 256 KB
RAM	32 MB SDRAM	32 MB SDRAM	64 MB SDRAM	64 MB SDRAM
User RAM	128 KB SRAM	1 MB SRAM	1 MB SRAM	1 MB SRAM
Remanent variables	32 KB	64 KB	256 KB	256 KB
Interface slots	1	1 / 3	1 / 3	1 / 3
Cooling	Fan-free	Fan-free	Fan-free	Fan-free derating / exchangeable fan
Processor support	Integrated I/O processor	Integrated I/O processor	Integrated I/O processor	Integrated I/O processor
Onboard interfaces	RS232, on X20 standard terminals, 115.2 kBit/s Ethernet, RJ45, 10/100 MBit/s POWERLINK, RJ45, 100 MBit/s 2x USB 1.1 1x X2X Link	RS232, on X20 standard terminals, 115.2 kBit/s Ethernet, RJ45, 10/100 MBit/s POWERLINK, RJ45, 100 MBit/s 2x USB 1.1 1x X2X Link	RS232, on X20 standard terminals, 115.2 kBit/s Ethernet, RJ45, 10/100 MBit/s POWERLINK, RJ45, 100 MBit/s 2x USB 1.1 1x X2X Link	RS232, on X20 standard terminals, 115.2 kBit/s Ethernet, RJ45, 10/100 MBit/s POWERLINK, RJ45, 100 MBit/s 2x USB 1.1 1x X2X Link
Dimensions (WxHxD) mm	150 x 99 x 85	150 / 200 x 99 x 85	150 / 200 x 99 x 85	150 / 200 x 99 x 85
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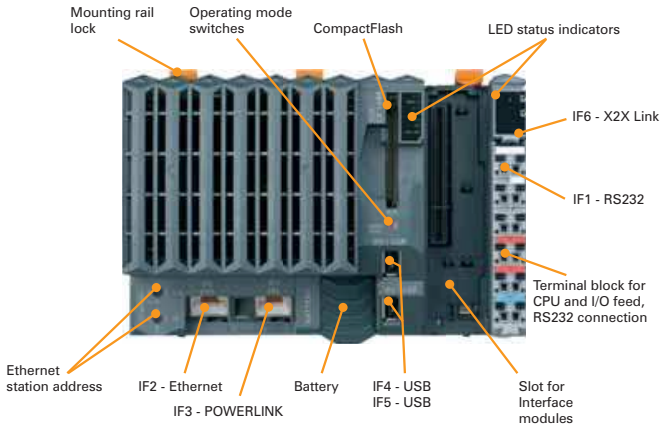
CPUs

Model number	Short description	
X20CP3486	X20 CPU, Celeron 650, 64 MB DRAM, 1 MB SRAM, exchangeable application memory: CompactFlash, 3 insert slots for X20IF modules, 2 USB interfaces, 1 RS232 interface, 1 Ethernet interface 10/100 Base T, 1 POWERLINK V1/V2 interface, order program memory separately.	96
X20CP1486	X20 CPU, Celeron 650, 64 MB DRAM, 1 MB SRAM, exchangeable application memory: CompactFlash, 1 insert slot for X20IF modules, 2 USB interfaces, 1 RS232 interface, 1 Ethernet interface 10/100 Base T, 1 POWERLINK V1/V2 interface, order program memory separately.	100
X20CP3485-1	X20 CPU, Celeron 400, 64 MB DRAM, 1 MB SRAM, exchangeable application memory: CompactFlash, 3 insert slots for X20IF modules, 2 USB interfaces, 1 RS232 interface, 1 Ethernet interface 10/100 Base T, 1 POWERLINK V1/V2 interface, order program memory separately.	104
X20CP1485-1	X20 CPU, Celeron 400, 64 MB DRAM, 1 MB SRAM, exchangeable application memory: CompactFlash, 1 insert slot for X20IF modules, 2 USB interfaces, 1 RS232 interface, 1 Ethernet interface 10/100 Base T, 1 POWERLINK V1/V2 interface, order program memory separately.	108
X20CP3484	X20 CPU, Celeron 266 compatible, 32 MB DRAM, 1 MB SRAM, exchangeable application memory: CompactFlash, 3 insert slots for X20IF modules, 2 USB interfaces, 1 RS232 interface, 1 Ethernet interface 10/100 Base T, 1 POWERLINK V1/V2 interface, order program memory separately.	112
X20CP1484	X20 CPU, Celeron 266 compatible, 32 MB DRAM, 1 MB SRAM, exchangeable application memory: CompactFlash, 1 insert slot for X20IF modules, 2 USB interfaces, 1 RS232 interface, 1 Ethernet interface 10/100 Base T, 1 POWERLINK V1/V2 interface, order program memory separately.	116
X20CP1483	X20 CPU, x86 100 MHz Intel compatible, 32 MB DRAM, 128 KB SRAM, exchangeable application memory: CompactFlash, 1 insert slot for X20IF modules, 2 USB interfaces, 1 RS232 interface, 1 Ethernet interface 10/100 Base-T, 1 POWERLINK V1/V2 interface, order program memory separately.	120

CPU
CP1485



The CP1485 is a powerful CPU for the X20 System. This CPU is especially useful for applications which require short cycle times, have to process very large amounts of data, or carry out floating point operations.

Ethernet and USB are onboard. In addition, the CPU has a POWERLINK V1/V2 connection for real-time communication. The only differences from the CP3485 are that the CP1485 only has one slot for interface modules and a smaller width.

- Intel Celeron 400 Performance with additional I/O processor
- Ethernet, POWERLINK V1/V2 and USB onboard
- 1 slot for modular interface expansion
- Compact Flash as removable application memory
- Fan-free
- Extremely compact

ETHERNET POWERLINK

Short description	X20CP1485-1
System module	CPU
Processor	Celeron 400
Interfaces	1x RS232, 1x POWERLINK V1/V2, 2x USB, 1x X2X Link
Controller	**X20CP1485-1**
Fastest task class cycle time	400 µs
Typical instruction cycle time	0.015 µs
L1 cache for data and program code	2x 16 KB
L2 cache	256 KB
Standard memory	
Working memory (SDRAM)	64 MB SDRAM
User RAM (SRAM)	1 MB SRAM
Remanent variables	256 KB
FPU	Yes
Integrated I/O processor	Processes I/O data points in the background
Data buffering	
Lithium battery	At least 3 years
Battery monitoring	Yes
CompactFlash slot	1
Real-time clock	Nonvolatile memory, resolution 1 second
Modular interface slots	1

Interfaces	X20CP1485-1
Interface IF1	
Type	RS232
Design	Contact via 12-pin terminal block TB12
Maximum transfer rate	115.2 kBit/s
Interface IF2	
Type	Ethernet
Design	Shielded RJ45 port
Transfer rate	10/100 MBit/s
Cable length	Max. 100 m between two stations (segment length)
Interface IF3	
Fieldbus	POWERLINK V1/V2
Type	100 Base-T (ANSI/IEEE 802.3)
Design	Shielded RJ45 port
Transfer rate	100 MBit/s
Cable length	Max. 100 m between two stations (segment length)
Interfaces IF4 and IF5	USB Rev. 1.1
IF6 interface	X2X Link
CPU and X2X Link supply	**X20CP1485-1**
Input voltage	24 VDC (-15% / +20%)
Input current	Max. 2.2 A
Reverse polarity protection	Yes
Fuse	Integrated, cannot be exchanged
X2X Link supply output	**X20CP1485-1**
Rated output power	7.0 W
Parallel operation	Yes [1]
Redundant operation of X2X Link supply	Yes

1) In parallel operation, only 75% of the rated power can be assumed. Please ensure that all parallel operating power supplies are switched on and off simultaneously.

Input I/O supply	X20CP1485-1
Input voltage	24 VDC (-15% / +20%)
Fuse	Recommended pre-fusing max. 10 A slow-blow
Output I/O supply	**X20CP1485-1**
Rated output voltage	24 VDC
Permitted contact load	10.0 A
General supply	**X20CP1485-1**
Status indicators	Overload, operating status, module status, RS232 data transfer
Diagnostics	
Module run/error	Yes, with status LED and software status
Overload	Yes, with status LED and software status
RS232 data transfer	Yes, with status LED
Electrical isolation	
X2X bus supply	Yes
I/O supply	No

CPU
CP1485

General information	X20CP1485-1
Status indicators	CPU function, overtemperature, Ethernet, Ethernet POWERLINK, CompactFlash, battery
Diagnostics	
CPU function	Yes, with status LED
Over-temperature	Yes, with status LED
Ethernet	Yes, with status LED
Ethernet POWERLINK	Yes, with status LED
CompactFlash	Yes, with status LED
Battery	Yes, with status LED and software status
Visual Components capability	Yes
ACOPOS capability	Yes
Cooling	Fan-free
Electrical isolation	
PLC - IF1/IF4/IF5	No
PLC - IF2/IF3/IF6	Yes
IF1/IF4/IF5 - IF2/IF3/IF6	Yes
IF1 - IF4/IF5	No
IF4 - IF5	No
Power consumption, without memory card, without interface module and USB	10.5 W
Internal power consumption of X2X Link and I/O supply [1)]	
Bus	1.42 W
I/O internal	0.6 W
Certification	CE, C-UL-US, GOST-R

1) The specified values are maximum values. The exact calculation is available for download as a data sheet with the other module documentation on the B&R homepage.

Operational conditions	X20CP1485-1
Operating temperature	
Horizontal installation	0°C to +55°C
Vertical installation	0°C to +50°C
Relative humidity	5 to 95%, non-condensing
Mounting orientation	Horizontal or vertical
Installation at altitudes above sea level	
0 - 2000 m	No derating
>2000 m	Reduction of ambient temperature by 0.5°C per 100 m
Protection type	IP20

Storage and transport conditions	X20CP1485-1
Temperature	-25°C to +70°C
Relative humidity	5 to 95%, non-condensing

Mechanical characteristics	X20CP1485-1
Dimensions (W x H x D)	150 x 99 x 85 mm
Comment	Order application memory (CompactFlash) separately Backup battery included in delivery X20 locking plate (right) included in delivery X20 terminal block (12-pin) included in delivery Interface module slot covers included in the delivery