

Power supply unit with E-bus/K-bus interface

CX2100-0xxx | Power supply units and and UPS modules for CX2000

The CX2100 power supply and UPS modules are used for supplying power to the components (CPU modules, system and extension modules) of a CX20x0 system. The power supply modules are controlled via TwinCAT. A FSIN LC display with 2 x 16 characters and a selector switch as well as an enter key allow the querying of internal status values as well as self-created display parameters or menus with and without input options.

K-bus or alternatively EtherCAT terminals can be connected on the right-hand side – the respective bus system is detected automatically and operated by the CPU. Power is supplied to the E-bus or K-bus electronics in the I/O terminals by an integrated, but internally separate power supply unit with 2 A at 5 V DC.

All power supply units from the CX2000 series are in principle passively cooled, have no fans and are intended for operation in the extended temperature range from -25...+60 °C. A choice of four different power supply units is available for the CX2000 CPUs:

- The standard power supply CX2100-0004 provides a maximum output of 45 W.

- The more powerful CX2100-0014 power supply unit offers a maximum output of 90 W and has to be used for CX2040 systems equipped with quad-core CPUs. Thanks to its the wider housing front the CX2100-0014 also allows passive ventilation through the front and is thus also suitable for horizontal mounting positions. Optionally the CX2100-0014 can be equipped with active ventilation (fan option) to provide the normally fanless CX2020 or CX2030 systems with a better heat dissipation for operation in different ambient conditions.
- In addition to the power supply functionality, the CX2100-0904 module also features an integrated capacitive UPS In the event of a power failure this enables the system to save data on the storage medium and then shut down in an orderly manner.
- The CX2100-0914 module can be used to charge external battery packs in order to provide backup power for the system and external components such as Control Panels.

Technical data	CX2100-0004	CX2100-0014	CX2100-0904	CX2100-0914
Power supply	24 V DC (-15 %/+20 %)			
Dielectric strength	500 V (supply/internal electronics)			
Max. output	45 W	90 W	45 W	90 W
I/O connection	E-bus (EtherCAT Terminals) or K-bus (Bus Terminals), automatic recognition			
Current supply I/Oterminals	2 A			
UPS	-	-	capacitively integrated	external Smart Battery
Charge	-	-	75 As	dependent on battery
Type of connection	spring-loaded technique (adapter terminal)			
Display	FSTN display 2 lines x 16 characters of text, illuminated			
Diagnostics LED	1 x PWR, 1 x I/ORun, 1 x I/OErr			
Max. power consumption	3.5 W			
Dimensions (W x H x D)	39 mm x 100 mm x 91 mm	64 mm x 100 mm x 91 mm	117 mm x 100 mm x 91 mm	73 mm x 100 mm x 91 mm
Weight	approx. 375 g	approx. 550 g	approx. 1030 g	approx. 800 g
Operating/storage temperature	-25+60 °C/-40+85 °C	-25+60 °C/-40+85 °C	-25+50 °C/-25+60 °C	-25+60 °C/-25+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 class	IP20			
Approvals	Ce, UL	œ, ul	Œ	Œ

