

CHARX SEC-3100 - AC charging controller



1139012

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CHARX control modular, AC charging controller, with Embedded Linux system, IEC 61851-1, operating mode: Stand-Alone, Client, Server, interface: Ethernet (2x), Cellular communication (4G/2G), CHARX control modular system bus, MICRO-USB type C, communication protocol: OCPP 1.6J, Modbus/TCP, MQTT, Connectable peripheral devices: Energy meter, RFID, DC residual current detection, DIN rail mounting

Commercial data

Item number	1139012
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	EM01
Product key	XWBRDA
GTIN	4063151080181
Weight per piece (including packing)	264 g
Weight per piece (excluding packing)	255 g
Customs tariff number	85371091
Country of origin	DE

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Technical data

Product properties

Product type	AC charging controller
Product family	CHARX control modular
Design	with Embedded Linux system
Operating mode	Stand-Alone
	Client
	Server
Charging standard	IEC 61851-1
Charging mode	Mode 3, Case B + C

Insulation characteristics

Overvoltage category	III
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System properties

IEC 61131 runtime system

Data storage system	8 GByte (eMMC)
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Electrical properties

Supply

Supply voltage	12 V DC $\pm 5\%$
Supply voltage range	11.4 V DC ... 12.6 V DC
Max. current consumption	2 A (Stand-alone operation)

Input data

Digital

Number of digital inputs	4
Description of the input	Digital input
Nominal input voltage U_N	12 V
Input voltage range U1	0 V ... 3 V (Off)
Input voltage range U2	9 V ... 15 V (On)

Output data

Digital

Output name	Digital output
Number outputs	4
Maximum output voltage	≤ 12 V (Low-side operation)
Maximum output current	max. 600 mA

Connection data

Conductor connection

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Connection method	pluggable
	Push-in technology
Conductor cross-section rigid	0.14 mm ² ... 1.5 mm ²
Conductor cross-section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross-section AWG	24 ... 16

Interfaces

Interface	Ethernet (2x)
	Cellular communication (4G/2G)
	CHARX control modular system bus
	USB-C

Wireless

Interface description	GSM / GPRS / EDGE / LTE (FDD)
Note	You will find a suitable antenna in the accessories are for this item
Frequency	700 MHz (LTE B28, hardware revision 1.4 or later)
	800 MHz (LTE B20)
	900 MHz (LTE B8)
	1800 MHz (LTE B3)
	2100 MHz (LTE B1, hardware revision 1.4 or later)
	2600 MHz (LTE B7, hardware revision 1.4 or later)
	900 MHz (GSM/GPRS/EDGE)
	1800 MHz (GSM/GPRS/EDGE)
Antenna	50 Ω impedance SMA antenna socket
SIM Interface	Micro SIM (3FF)
LTE	CAT1
Protocols supported	OCPP 1.6J

Ethernet

Interface	Ethernet
Connection method	RJ45 jack
Number of interfaces	2
Number of supported devices	2
Serial transmission speed	10/100 Mbps
Transmission length	100 m
Protocols supported	OCPP 1.6J
	Modbus/TCP
	MQTT
	HTTP
	HTTPS

Others

Interface	Configuration and diagnostics
Connection method	USB type C
Number of interfaces	1

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Protocols supported	RNDIS
Interface	Energy meter
Bus system	RS-485
Transmission speed range	9.6 kbps ... 115.2 kbps (Automatic setting in accordance with the selected energy meter)
Interface	RFID readers
Bus system	RS-485
Transmission speed range	9.6 kbps ... 115.2 kbps (Automatic setting in accordance with the selected RFID reader)

Others

Interface	CHARX control modular system bus
Connection method	DIN rail bus connector
Number of interfaces	1

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 65 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
Air pressure (operation)	70 kPa ... 106 kPa (up to 3000 m above mean sea level)
Air pressure (storage/transport)	58 kPa ... 106 kPa (up to 4500 m above mean sea level)

Approvals

Conformity/Approvals

Conformance	CE-compliant
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Standards and regulations

Standards

Standards/regulations	IEC 61851-1
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Mounting

Mounting type	DIN rail mounting
Assembly note	DIN rail mounting
Mounting position	any

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Classifications

ECLASS

ECLASS-13.0	27144703
ECLASS-15.0	27144703

ETIM

ETIM 9.0	EC002889
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UNSPSC

UNSPSC 21.0	39121800
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	29cc0dbf-63f3-4588-8ae5-6fa84c1a3237

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