BENY
7.4kW OCPP AC EV Charger
Datasheet

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Product Overview

Enjoy a satisfying charging experience with the fully certified BENY wall-mounted OCPP AC EV charger. It is designed to be intelligent, reliable, convenient, and efficient. Control your charger by smart app and various connectivity options.

Product Advantages

- Wall-Mounted
- IP65 Rating
- Wi-Fi/Ethernet /Bluetooth/4G
- OCPP 1.6J
- Smart APP
- DLB and Solar Compatible
- Full Protection

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OCPP AC EV Charger

Electrical

Charging Capacity	1-phase, 230-400V 6A -32A, 50-60Hz
Charge Mode	Mode 3 (IEC 61851-1)
Output Power	1.3kW – 7.4kW
Plug Type	Type 2

Protection and certification

Build-in RCD	DC6mA Leakage Sensor Built-in
Protection Degree	IP65, IK10
Housing Fire Ratings	V0
Operating Temperature	-25°C~+55°C
Compliance	IEC61851-1, IEC61851-21-2
Certificate	CE, CB, UKCA

Connectivity

Authorization	Auto-start standard / RFID card option
Status Indication	LED Lights
WLAN Communication	Wi-Fi / Bluetooth 4.2 option
Charging Protocol	OCPP1.6-J

Mechanical

Housing	Plastic
Dimension	W169 x H380 x D151/201 mm
Mounting	Wall or Pole

Wi-Fi

Operating Frequency Range	2412 - 2484MHz
Wi-Fi Protocols	IEEE 802.11 b/g/n
Channels	14
TX Power	18.5~20.5dBm
EIRP	0.459
TX bandwidth	20MHz/40MHz
Modulation type	OFDM & DSSS
Transmitting Duty Cycle	10%

BlueTooth BLE

Sensitivity @30.8% PER	-93 dbm
Co-channel C/I	+10dB
RF Power Control Range	-12 ~ 9dbm

NFC

Modulation Type	ASK
Operating Frequency	13.56MHz
H-field strength	13.29 dBuA/m@3m distance
Antenna Type	PCB antenna (coil)

4G

Frequency Bands:	LTE-FDD:B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28
	LTE-TDD: B38/B39/B40/B41
Data:	LTE-FDD: Max. 150 Mbps (DL)/Max. 50 Mbps (UL)
	LTE-TDD: Max. 130 Mbps (DL)/Max. 30 Mbps (UL)
Output Power:	LTE-FDD: Class 3 (23 dBm ±2 dB) LTE-TDD: Class 3 (23 dBm ±2 dB)

3G

Frequency Bands:	WCDMA: B1/B2/B4/B5/B6/B8/B19
Data:	WCDMA: Max. 384 kbps (DL)/Max. 384 kbps (UL)
Output Power:	WCDMA: Class 3 (24 dBm +1/-3 dB)

2G

Frequency Bands:	GSM: B2/B3/B5/B8
Data:	EDGE: Max. 296 kbps (DL)/Max. 236.8 kbps (UL)
	GPRS: Max. 107 kbps (DL)/Max. 85.6 kbps (UL)
Output Power:	GSM850: Class 4 (33 dBm ±2 dB) GSM850 8-PSK: Class E2 (27 dBm ±3 dB)

Model Selection

OCPP AC EV Charger	BCP-A2N-P
	
Categorization	Tethered
Maximum Power	7.4kW
Input Voltage /Output voltage	AC230V 1-Phase
Input Frequency	50/60Hz
Meter	Built-in metering chip + external MID meter (optional)
Display	LED Lights
RFID	●
DLB	○
Wi-Fi	●
Ethernet	●
Bluetooth	●
4G	○
Over Voltage & Under Voltage Protection	●
Emergency Stop	●
Over Current Protection	●
CP Signal Short Circuit Protection	●
Over Temperature Protection	●
Lightning Protection	●
Contactor Adhesion Protection	●
Protection Degree	IP65
Environment Temperature	-25°C~+55°C

● : Standard ○ : Optional

Storage temperature	-40°C~+85°C
Maximum Altitude	<2000m
Input Current	32A
Maximum Output Current	32A
Efficiency	about 100%
Working humidity	95% non-condensing
Cable length	7.5M / 10M
Gross Weight	7KG
Standards	IEC61851-1,IEC61851-21-2
Communication interface	4G/ Wireless/ LAN Port
Communication protocol	OCPP1.6-J
User management	Bluetooth/ Wi-Fi/ Smart APP
Starting	Auto-start standard / RFID card

OCPP Specification

Version	OCPP1.6-J
TLS	support
HTTP Basic Authentication	support
Feature Profiles	Core Firmware Management Local Auth List Management Remote Trigger Reservation Smart Charging
Get Diagnostics Protocol	FTP
Update Firmware Protocol	HTTP

Security Profile

Level	Details	Yes or No
Security Profile 0	Regular OCPP 1.6J without security	√
Security Profile 1	OCPP 1.6J with Basic Authentication	√
Security Profile 2	OCPP 1.6J with TLS (Only Server-side certificate) and Basic Authentication	√
Security Profile 3	OCPP 1.6J with TLS using Server and client-side certificates	X

OCPP Configurations

Name	Support	(R)/ (RW)
Allow Offline Tx For UnknownId	YES	RW
Authorization Cache Enabled	YES	RW
Authorize Remote Tx Requests	YES	RW
Blink Repeat	NO	RW
Clock Aligned DataInterval	YES	RW
Connection Time Out	YES	RW
Connector Phase Rotation	YES	RW
Connector Phase Rotation MaxLength	YES	R
Get Configuration MaxKeys	YES	R
Heartbeat Interval	YES	RW

OCPP Configurations

Light Intensity	NO	RW
Local Authorize Offline	YES	RW
Local Pre Authorize	YES	RW
Max Energy OnInvalidId	NO	RW
Meter Values Aligned Data	YES	RW
Meter Values Aligned Data Max Length	YES	R
Meter Values Sampled Data	YES	RW
Meter Values Sampled Data Max Length	YES	R
Meter Value Sample Interval	YES	RW
Minimum Status Duration	YES	RW
Number Of Connectors	YES	R
Reset Retries	YES	RW
Stop Transaction On EVSide Disconnect	YES	RW
Stop Transaction OnInvalidId	YES	RW
Stop Txn Aligned Data	NO	RW
Stop Txn Aligned Data Max Length	NO	R
Stop Txn Sampled Data	NO	RW
Stop Txn Sampled Data Max Length	NO	R
Supported Feature Profiles	YES	R
Supported Feature Profiles Max Length	YES	R
Transaction Message Attempts	YES	RW
Transaction Message Retry Interval	YES	RW
Unlock Connector On EVSide Disconnect	YES	RW
Web Socket Ping Interval	YES	RW
Local Auth List Enabled	YES	RW
Local Auth List Max Length	YES	R
Send Local List Max Length	YES	R

OCPP Configurations

Reserve Connector Zero Supported	YES	R
Charge Profile Max Stack Level	YES	R
Charging Schedule Allowed Charging RateUnit	YES	R
Charging Schedule Max Periods	YES	R
Connector Switch 3 to 1 Phase Supported	YES	R
Max Charging Profiles Installed	YES	R

Custom Configuration Items

Items	Type	Accessibility	Range	Default	Explain
DLBEnabled	boolean	RW	false/true	false	false: Disable DLB All the following configurations will become invalid true: Enable DLB
DLBAPPConfigEnabled	boolean	RW	false/true	false	false: "DLBNormalModeMaxCurrent", "DLBPVModeMaxGridCurrent" will become invalid
DLBType	integer	R	0-2	0	According to the type of DLB box already connected to the EV charger, the APP displays the corresponding configuration page. The value of this configuration item. 0 is Normal DLB 1 is Solar DLB 2 is External edge equipment
DLBNormalModeMax Current	integer	RW	0-99	40	To set the max current of DLB
DLBNormalExtreme ModeEnabled	boolean	RW	false/true	false	False: Extreme mode disabled True: Extreme mode enable
DLBPVModeMax GridCurrent	integer	RW	0-99	0	To set the max grid current 0: Pure photovoltaic mode 1-98: Hybrid mode (corresponding to 1-98A) 99: Full speed mode
DLBPVMode NightSpeedEnabled	boolean	RW	false/true	false	Full speed mode at night under PV mode true: Full-speed mode charging will start automatically from 8:00 pm to 6:00 am.
DLBDataTransfer Interval	integer	RW	0-9999	0	0: Disable 1-9999: DLB current will be reported in DataTransfer during charging.

Custom Configuration Items

DLBDataTransfer AnytimeEnabled	boolean	RW	false/true	false	Fales: DLBDataTransfer will be not reported True: DLBData transfer will be reported real time.
DLBPVMode MaxSpeedStart	integer	RW	0-23	20	
DLBPVMode MaxSpeedStop	integer	RW	0-23	6	
ChargePointURL	csl	RW			max length 200 byte
ChargePointVendor	csl	RW			max length 19 byte
ChargePointModel	csl	RW			max length 49 byte
ChargePointAuthKey	csl	RW			max length 49 byte
ChargePointAuthEnable	boolean	RW			
RandomDelayMin	integer	RW	0-1800	0	Minimum random delay at each start of charging (Only supported for single connector models)
RandomDelayMax	integer	RW	0-1800	0	Maximum random delay at each start of charging (Only supported for single connector models)
UserCurrentLimit	integer	RW	6-32(one socket) 12-64(two socket)	32(one socket) 64(two socket)	
EmergencyStopEnable	boolean	RW	false/true	true	
GndDetectEnable	boolean	RW	false/true	true	