



BENY

Datasheet



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⚠️ If the models and specifications in this product catalogue change due to product updates, we will not provide prior notification.



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WWW.EVB.COM

BENY

Product Overview

This is a mode 3 type AC EV Charger which is designed according to IEC-61851-21-2 standard. Experience effortless interaction with its 5.0-inch LCD Screen interface. Take control of your charger via a smart app and various connectivity choices.

Antenna

Logo

LCD Screen

RFID

Emergency
Button Switch

Type 2 Socket

Function Test
Button

Product Advantages



OCPP 1.6J



5.0-inch
LCD screen



IP65 Rating



Wi-Fi/Ethernet
/Bluetooth/4G



T2S Socket
Option



DLB and Solar
Compatible



Full Protection

OCPP AC EV Charger

Protection Functions



Charging protocol
OCPP1.6-J



BCPCM Series EV chargers have an IP65 patented designcase for outdoor and indoor use.



The EV charger output power can be adjusted from 6A all the way up to 32A.



The type 2 socket and type 2 connector are with IEC 62196-2, makes highly flexible and compatible with all electric vehicles.



Electrical

Charging Capacity

1.3kW – 7.4kW / 4.1kW – 22kW

Charge Mode

Mode 3 (IEC 61851-1)

Output Power

Selectable 1-phase or 3-phase, 230-400V 6A -32A, 50-60Hz

Socket Type

Type 2



Protection and certification

Build-in RCD

Built-in Type A RCBO , Built-in DC6mA Leakage Sensor

Socket

IP65, IK10

Operating Temperature

-30~+55°C

Compliance

IEC61851-1,IEC61851-21-2,IEC61000-4
CE EMC EU/2014.CE Low Voltage EU/2014/35

Certificate

CE



Mechanical

Housing

Metal

Dimension

W260 x H360 x D152 mm

Mounting

Wall or Pole



Connectivity

Authorization

Auto-start standard / RFID card option

Status Indication

LCD Screen+LED Lights

WLAN Communication

Wi-Fi / Bluetooth 4.2 option

Charging Protocol

OCPP1.6-J



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)

Model Selection



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)

Wallbox Models	BCPCM-A2N-P	BCPCM-AT2N-P-16	BCPCM-AT2N-P
			
Maximum Power	7.4kW	11kW	22kW
Input Voltage /Output voltage	AC230V 1-Phase	AC400V 3-Phase	AC400V 3-Phase
Input Frequency	50/60Hz		
Tethered/Socket	Tethered		
Meter	Built-in MID Meter		
Display	Five-inch LCD Screen + 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	✓	✓	✓
Built-in Electric Meter	✓	✓	✓

Length of gun cable	5M		
Rate Charging Current	6-32A	6-16A	6-32A
Protection Degree	IP65		
Environment Temperature	-30°C~~+55°C		
Storage Temperature	-40°C~~+85°C		
Gross Weight	13KG		
Maximum Altitude	<2000m		

✔ : Standard ○ : Optional

Model Selection

Wallbox Models	BCPCM-B2N-P	BCPCM-BT2N-P-16	BCPCM-BT2N-P
			
Maximum Power	7.4kW	11kW	22kW
Input Voltage /Output voltage	AC230V 1-Phase	AC400V 3-Phase	AC400V 3-Phase
Input Frequency	50/60Hz		
Tethered/Socket	Socket		
Meter	Built-in MID Meter		
Display	Five-inch LCD Screen + LED Lights		
T2S Socket	○	○	○
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	✔	✔	✔
Built-in Electric Meter	✔	✔	✔

Rate Charging Current	6-32A	6-16A	6-32A
Protection Degree	IP65		
Environment Temperature	-30°C~~+55°C		
Storage Temperature	-40°C~~+85°C		
Gross Weight	9.3KG		
Maximum Altitude	<2000m		

☒ : Standard ☐ : Optional

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
DLBNormalModeMaxCurrent	integer	RW	0-99	40	To set the max current of DLB
DLBNormalExtremeModeEnabled	boolean	RW	false/true	false	False: Extreme mode disabled True: Extreme mode enable
DLBPVModeMaxGridCurrent	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
DLBPVModeNightSpeedEnabled	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.
DLBDataTransferInterval	integer	RW	0-9999	0	0: Disable 1-9999: DLB current will be reported in DataTransfer during charging.

Custom Configuration Items

DLBDataTransferAnytimeEnabled	boolean	RW	false/true	false	Fales: DLBDataTransfer will be not reported True: DLBData transfer will be reported real time.
DLBPVModeMaxSpeedStart	integer	RW	0-23	20	
DLBPVModeMaxSpeedStop	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			
ChargePointQRCode_1	csl	RW			{Only supported with LCD models}
ChargePointQRCode_2	csl	RW			{Only supported with LCD models}
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	