



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, it can be wallmounted, it can also be installed on a pedestal. Take control of your charger via a smart app and various connectivity choices.

Antenna

Logo

LED Light

RFID

Emergency
Button Switch

Type 2 Socket

Function Test
Button

Product Advantages



IP65 Rating



Wi-Fi/Ethernet
/Bluetooth/4G



OCPP 1.6J



T2S Socket
Option



DLB and Solar
Compatible



Full Protection

OCPP AC EV Charger

Protection Functions



Charging protocol
OCPP1.6-J



BCPM Series EV chargers
have an Ip65 patented
designcase for outdoor and
indoor use.



The type 2 socket with
shutter in accordance with
IEC 62196-2,makes highly
flexible and compatible
with all electric vehicles.



Plug and start to charge
automatic.
(RFID card for option)



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



EV Charger Model

B	CPM	AT	1	N	P	16
↓	↓	↓	↓	↓	↓	↓
Company	Application	Categories	Classification	Classification	OCPP	Max Current
B: BENY New Energy	CPM: Home Charging	A: 1-Phase Tethered B: 1-Phase Socket AT: 3-Phase Tethered BT: 3-Phase Socket	1: Autostart 2: With RFID	None: Without The Following Functions D: With DLB Function N: Smart Version with DLB Function	P: OCPP	Blank: 32A 16: 16A

✔ RFID(Radio Frequency Identification Card)

RFID card reader enabled to start up charging function while approaching the swipe area.



EV Charger for Smart Home

Smart APP



The EV charger can be controlled by smart APP via Wi-Fi or Bluetooth connection.



One to one binding EV charger by reset the password, prevent the EV charger being stolen.



View charging data and status.



Set up various charging configurations, charging current,DLB mode,etc.



Scheduled charging.



Firmware update.



View historical charging records.



Setting monthly maximum charging values.

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 Socket with Shutter

Protection and certification

Build-in RCD	Built-in 2P/4P 30mA 40A Type A RCCB, 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

Connectivity

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

Mechanical

Housing	Metal
Dimension	W278 x H360 x D152 mm
Mounting	Wall or Pole

EV Charger for Smart Home



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

Wallbox Models	BCPM-A2N-P	BCPM-AT2N-P
		
Maximum Power	7.4kW	22kW
Input Voltage /Output voltage	AC230V 1-Phase	AC400V 3-Phase
Input Frequency	50/60Hz	
Tethered/Socket	Tethered	
Meter	Built-in metering chip + external MID meter (optional)	
Display	LED Lights	
RFID	☒	☒
DLB	☐ (Optional)	☐
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	☒	☒

Length of gun cable	5M
Rate Charging Current	6-32A
Protection Degree	IP65
Environment Temperature	-30°C~+55°C
Storage Temperature	-40°C~+85°C
Gross Weight	12KG
Maximum Altitude	<2000m

☒ : Standard ☐ : Optional

Model Selection

Wallbox Models	BCPM-B2N-P	BCPM-BT2N-P
		
Maximum Power	7.4kW	22kW
Input Voltage /Output voltage	AC230V 1-Phase	AC400V 3-Phase
Input Frequency	50/60Hz	
Tethered/Socket	Socket	
Meter	Built-in metering chip + external MID meter (optional)	
Display	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	☒	☒

Rate Charging Current	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			
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	