



bp pulse home

Smart and simple home charging

Smart

- **AC Charging** – most convenient for locations where vehicles are parked for long periods of time. Charge times 0-100% typically 6-12hrs*
- **Smart charging enabled** – take control of your EV charging scheme to fit your life-style. Our cloud-based Pulsevision management platform and mobile app put the power in your hands.
- **Wi-Fi and wired Ethernet** connectivity.
- **Scheduling** – reduce charging costs and support net-zero carbon emissions in conjunction with off-peak cost-effective charging or automatically follow TOU (Time of Use) tariffs.
- **Product security** – prevent unauthorised use by remotely locking the charger.
- **Over-The-Air (OTA) updateable** to enable new features and for security updates.
- **Plug and Charge (ISO15118) ready †**
- **ISO15118-20 ready** – for Vehicle-to-Home (V2H) and Vehicle-to-Grid (V2G) bi-directional charging applications. †

* actual charge times vary depending on vehicle.

† to be released early 2023

Secure

- Protected – by advanced overload protection and electric current management software
- A complete service from design, manufacturing, installation to handover
- 24/7 customer support
- Expertly installed by professional, skilled electricians and engineers

Save money

- UK Government OZEV EVHS approved.
- 3-year warranty as standard

Options available

- Single Type 2 socket outlet
- Single Type 1 tethered
- Single Type 2 tethered
- Single phase AC
3.6kW to 7kW output
- Three phase AC
11kW to 22kW output
- Wall mountable





Main features



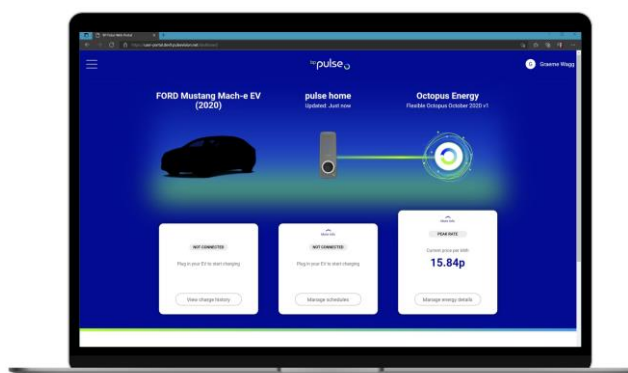
Status indicator

Socket/holster lighting

Type 2 socket outlet with flap

Function button

Pulsevision Web Portal



- Freely accessible from any web browser, Pulsevision provides customers easy access to manage their bp pulse home charger.

bp pulse home mobile app



- Mobile app, puts remote access in the palm of your hand – the same power as Pulsevision but even greater convenience.



General specifications

	Single Phase				Three Phase			
Product code	HCW7T1, HCW7T2, HCW7S2				HCW22T2, HCW22S2			
Connectivity	Wi-Fi, Ethernet				Wi-Fi, Ethernet			
Input	220-240 VAC 50/60Hz				400 VAC 50/60Hz			
Rated Current	1P + N + E 32A max				3P + N + E 32A max			
	16A 3.6kW	32A 7.3kW	16A 3.6kW	32A 7.3kW	16A 11kW	32 A 22kW	16A 11kW	32 A 22kW
Electrical output to vehicle	220-240 VAC 50/60Hz				400 VAC 50/60Hz			
Dimensions (W x H x D)	176 x 495 x 161mm							
	Tethered				Socketed			
Shipping weight	Typically 6kg				Typically 4.6kg			
Warranty	Comprehensive three years' parts and labour warranty included as standard							

Technical specifications

Output connector tethered Type 2: (Single and Three Phase)	Output charging connector Type 2 on a 4.7m cable measured from the point the cable exists the unit to the end of the Type 2 connector
Output connector socket Type 2: (Single and Three Phase)	Output charging connector Type 2
Operating temperature range	-30°C to +50°C
Operating humidity range	5% to 95% non-condensing
Ethernet	10/100BaseTX
Wi-Fi Operating frequency bands, subject to network connectivity	Wi-Fi frequency 802.11 b/g 2.4GHz
Communication protocol	OCPP 1.6J; OCPP 2.0.1 on release
Mechanical impact protection rating	IK08
Ingress protection rating	IP54
Nature of short circuit protection devices	External over-current protection
Measures for protection against electric shock	External 30mA AC current leakage protection and over-current protection, built-in 6mA DC current leakage protection and PEN Fault protection



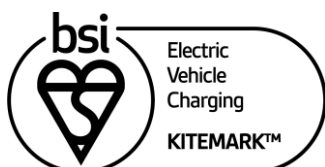
Technical specifications cont.

Rated voltage of a circuit of the assembly	216V AC to 253V AC (1ph) 376V AC to 440V AC (3ph)
Rated insulation voltage of a circuit of the assembly	216V AC to 253V AC (1ph) 376V AC to 440V AC (3ph)
Rated impulse withstand voltage of the assembly	2kV Line-to-Neutral 4kV Line-To-Earth
Rated current of a circuit	32A
Rated peak withstand current	1500A
Rated short-time withstand current of a circuit of an assembly	N/A
Rated conditional short-circuit current of an assembly	1,000A 1ms, 3 times
Rated diversity factor (Taking into account differences in 61349-7)	1
Additional requirements	Type A RCD, over-current protection
Pollution degree	4
Type of earthing system intended for the installation	TN-C-S (with built-in PEN Fault condition) and TT
Intended for use by ordinary persons or skilled persons?	Ordinary
EMC classification	Class B
Special service conditions	Ethernet, Wi-Fi



Technical specifications cont.

<p>Electromagnetic Compatibility Regulations 2016</p>	<p>Designated Standards: IEC 61851-21-2: 2017 EMC requirements for off board electric vehicle charging systems IEC / EN 61000-4-2: Electrostatic discharge IEC / EN 61000-4-3: Radiated RF immunity IEC / EN 61000-4-4: Electrical Fast transient burst immunity IEC / EN 61000-4-5: Surge immunity IEC / EN 61000-4-6: Conducted RF immunity IEC / EN 61000-4-8: Power frequency magnetic field immunity IEC / EN 61000-4-11: Voltage dips, short interruptions and voltage variation immunity CISPR 32 / EN 55032: Conducted emissions CISPR 11 / EN 55011: Radiated emissions CISPR 16 / EN 55016 :Radio disturbance and immunity IEC / EN 61000-3-11: Voltage fluctuations and flicker IEC / EN 61000-3-12: Harmonic current emissions</p>
<p>UK Electrical Equipment (Safety) Regulations 2016</p>	<p>Designated Standards: IEC 61851-1: 2017 BS EN 61851-1: 2019</p>
<p>UK Radio Equipment Regulations 2017</p>	<p>Designated Standards: EN 301 489-1 Radio EMC EN 301 489-3 Radio EMC EN 301 489-17 Radio EMC EN 301 489-52 Radio EMC EN 300 330 Radio Spectrum EN 300 328 Radio Spectrum EN 301 908-1 Radio Spectrum EN 301 511 Radio Spectrum EN 50364 Radio RF Safety</p>
<p>EU Radio Equipment Regulations</p>	<p>Radio Equipment Directive (RED) 2014/53/EU</p>
<p>RoHS Regulations</p>	<p>UK RoHS Regulations 2012 EU RoHS Directive 2011/65/EU</p>
<p>Certification Markings</p>	
<p>Additional Certifications</p>	<p>BSI Kitemark, certificate no. KM 741886</p>



Order codes

Chargers

Configuration	SKU	Description
Tethered	HCW7T1	Home Wi-Fi 7kW Tethered Type 1
	HCW7T2	Home Wi-Fi 7kW Tethered Type 2
	HCW22T2	Home Wi-Fi 22kW (3Phase) Tethered Type 2
Socketed	HCW7S2	Home Wi-Fi 7kW Socket Type 2
	HCW22S2	Home Wi-Fi 22kW (3Phase) Socket Type 2

Accessories

Item	SKU	Description
Current sensor	HCCT	Wireless CT Measurement Clamp
Post mount	ACCPPOSTSQ2	bp pulse home / pro smart post mount
4G/LTE Kit	4GUPK-EU	4G/LTE Upgrade Kit – UK/EU
Cables	4MT2T1	Type 2 to Type 1 Cable – 4m – 1-Phase
	4MT2T2-1	Type 2 to Type 2 Cable – 4m – 1-Phase
	7MT2T1	Type 2 to Type 1 Cable – 7.5m – 1-Phase
	7MT2T2-1	Type 2 to Type 2 Cable – 7.5m – 1-Phase
	4MT2T2	Type 2 to Type 2 Cable – 4m – 3-Phase
	7MT2T2	Type 2 to Type 2 Cable – 7.5m – 3-Phase

Spares

Spares	HCFASCIA	Outer fascia
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Further descriptions

Single Phase (7kW)

230V AC, 16A (3kW), 32A (7kW)

Three Phase (22kW)

400V AC, 16A (11kW), 32A (22kW)

Type 1 + 2 connectors

EV manufacturers typically support Type 1 or Type 2 connectors.

Tethered and socketed (non-tethered)

Personal preference typically determines whether a tethered or socketed charger is chosen.

Tethered: Fixed cable length (4.7m); Stored (wrapped around the charger and plugged into the plug holster when not in use) is always available with the charger.

Socketed: Allows for a choice of cable lengths (4m and 7.5m options); Requires storing separately and of course there are two connectors to plug in.

Cables allow connections between the Type 2 charger socket and either Type 1 or Type 2 vehicle sockets.

Internet connected via Wi-Fi, wired LAN ethernet

Provides required connectivity between EVSE and the Charge Point Management System (CPMS)

Auto charging

Without an active schedule a user can simply plug in and charge (subject to enable/disable status). Automatic EV detection, easy status indication.

LED status indication

Status of the charger is indicated on the front of the charger with multi-function LEDs (visible when powered): Blue indicates idle, the unit is ready to deliver a charge. Green indicates that a charge is being delivered. White indicates that the unit is disabled a connected EV will not charge without being enabled by an authorised user (via the app or web portal). Red indicates that a fault may be present.

Socket/holster location lighting

Locating the front facing socket/holster is eased with white lighting. Users can customise the brightness level via the WebUI hosted on the charger.

Remote enable/disable charging

Enable/disable of charging gives the user the ability to prevent unauthorised use. When the charger is disabled, a charge will not be delivered. Authorisation is granted by the user remotely via the mobile app or web portal.

Mobile app (iOS and Android)

Users can download the free pulse home mobile application and interact with the bp pulse home charger remotely. The mobile app provides simple and intuitive functions including but not limited to; set and manage time-based charging schedules, instant override start/stop charging, toggle enable/disable, view current and historical charge session data.

Pulsevision web portal

Users can login to the Pulsevision web portal our cloud-based charge point management platform from any internet connected device with a web browser. The web portal provides simple and intuitive functions including but not limited to; set and manage time-based charging schedules, instant override start/stop charging, toggle enable/disable, view current and historical charge session data.

Over-The-Air updates

Users can upgrade and keep up-to-date with new product enhancements. This capability includes: new features, bug fixes, security updates and critical configuration updates. Users will receive notifications to acknowledge and accept updates.