



bp pulse pro charger lite

Smart, seamless and sustainable fleet and workplace EV 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 estate with our cloud-based Chargevision management platform for monitoring and reporting.
- **RFID** authenticated access control
- **4G/LTE, WiFi and wired Ethernet** connectivity.
- **Scheduling +** – reduce charging costs and support net-zero carbon emissions in conjunction with off-peak or TOU (Time of Use) tariffs.
- **Load Management**– share available power across sockets on a site to optimise charging; install up to 3x the number of sockets without any costly infrastructure upgrades; and avoid demand penalty charges.
- **Over-The-Air (OTA) updateable** to enable new features and for security updates.

* actual charge times vary depending on vehicle.

+ to be released Q4 2022

Seamless

- Single RFID card provides access to depot/workplace and public bp pulse chargepoints.

Sustainable

- Cost-effective and enables a net-zero carbon EV charging solution for site and fleet managers.
- Helps support Corporate Social Responsibility (CSR) and public desire for increased supplier sustainability.





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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 WCS approved
- 3-year warranty as standard

Options available

- Single Type 2 socket outlet
- Single phase AC
3.6kW to 7kW output
- Three phase AC
11kW to 22kW output
- Wall mountable
- Single or dual pole mountable



Main features



- RFID card reader
- Status indicator ring
- Type 2 socket outlet with flap

ChargeVision Portal



Free access to ChargeVision, our advanced online usage monitoring and reporting system

bp pulse network



Seamlessly access the UK's largest public charging network from bp pulse and your private depot / workplace chargepoints with the same RFID card





General specifications

	Single Phase		Three Phase	
Product code	BVW7S2	BVG7S2	BVW22S2	BVG22S2
Connectivity	Wi-Fi, Ethernet	4G, Wi-Fi, Ethernet	Wi-Fi, Ethernet	4G, Wi-Fi, Ethernet
Input:	230V AC 50/60Hz		400V AC 50/60Hz	
Rated Current	1P + N + E 32A max		3P + N + E 32A max	
Power Level Control	10-13-16-20-25-30-32A			
Electrical output to vehicle:	220-240V AC 50/60Hz		400V AC 50/60Hz	
Dimensions (W x H x D)	315 x 460 x 135mm			
Shipping weight	Typically 4.8kg		Typically 5.0kg	
Warranty	Comprehensive three years parts and labour warranty.			

Technical specifications

Output connector socket (Single and Three Phase)	Type 2
Operating temperature range	-35°C to +55°C
Operating humidity range	5% to 95% non-condensing
Ethernet	10/100BaseTX
4G/LTE operating frequency band, subject to network connectivity	E-GSM 900, DCS 1800, UMTS Band I, UMTS Band VIII, LTE Band 1, LTE Band 3, LTE Band 7, LTE Band 8, LTE Band 20, GPS L1/GLONASS G1/BDS/Galileo E1
Wi-Fi Operating frequency bands, subject to network connectivity	Wi-Fi frequency 802.11 a/b/g/n 2.4GHz
RFID system	ISO 14443A 13.56MHz
Communication protocol	OCPP 1.6J
Mechanical impact protection rating	IK08
Ingress protection rating	IP54





Technical specifications cont.

Rated current of a circuit	32A	
Additional requirements	Type A RCD, over-current protection	
Type of earthing system intended for the installation	TN-C-S (with built-in PEN Fault protection) and TT	TN-C-S
Intended for use by ordinary persons or skilled persons?	Ordinary	
EMC classification	Class B	
Special service conditions	LTE, Ethernet, Wi-Fi	
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	



UK Electromagnetic Compatibility Regulations 2016	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
UK Electrical Equipment (Safety) Regulations 2016	Designated Standards: IEC 61851-1: 2017 BS EN 61851-1: 2019
UK Radio Equipment Regulations 2017	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
EU Radio Equipment Regulations	Radio Equipment Directive (RED) 2014/53/EU
RoHS Regulations	UK RoHS Regulations 2012 EU RoHS Directive 2011/65/EU
Certification Markings	



Order codes

Chargers

Configuration	SKU	Description
Single	BVW7S2	EVC04-AC7SW (OPD) pro lite WiFi 7kW
	BVW22S2	EVC04-AC22SW pro lite WiFi 22kW
	BVG7S2	EVC04-AC7SWL (OPD) pro lite WiFi+4G 7kW
	BVG22S2	EVC04-AC22SWL pro lite WiFi+4G 22kW
Single + post mount	BVW7S2RE1	EVC04-AC7SW pro lite WiFi 7kW w/post
	BVW22S2RE1	EVC04-AC22SW pro lite WiFi 22kW w/post
	BVG7S2RE1	EVC04-AC7SWL pro lite WiFi+4G 7kW w/post
	BVG22S2RE1	EVC04-AC22SWL pro lite WiFi+4G 22kW post
Dual + post mount	BVW7S2RE2	2x EVC04-AC7SW pro lite WiFi 7kW w/post
	BVW22S2RE2	2x EVC04-AC22SW pro lite WiFi 22kW w/post
	BVG7S2RE2	2xEVC04-AC7SWL pro lite WiFi4G 7kW post
	BVG22S2RE2	2xEVC04-AC22SWL pro lite WiFi4G 22kWpost

Accessories

Post mount	ACCPPOSTRE2	Rectangular post mount
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





Further descriptions

Single Phase (7kW)

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

Three Phase (22kW)

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

Type 2 socket

EV manufacturers typically support Type 1 or Type 2 connectors.

Cables allow connections between the Type 2 charger socket and either Type 1 or Type 2 vehicle sockets. Choice of cable lengths (4m and 7.5m options); Requires storing and plugging in both ends

Internet connected via Wi-Fi, wired LAN ethernet or 4G/LTE

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

LED status indication

Status of the charger is indicated on the front of the charger with a multi-function LED ring (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 and authorised user (via the app or portal). Red indicates that a fault may be present.

Chargevision portal

Site and fleet managers can access our cloud-based management platform via a web portal for live monitoring and reporting and historical usage reporting.

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.

Load Management

This feature automatically distributes available power evenly across sockets within a defined cluster of up to 32 chargers on a site whilst maintaining a minimum charge current of 10A (2.3kW). This allows up to 3x the number of sockets to be installed without the cluster ever exceeding its supply limit, avoiding the need for costly infrastructure upgrades. Furthermore the feature helps avoid costly demand penalty charges.