



## The complete guide to workplace charging



To access this charging point  
rest of the UK's largest charging network  
please visit [www.polar-network.com](http://www.polar-network.com).

polar



bp chargemaster



Serial Number: 0WUT756  
Customer Service  
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# Welcome to BP Chargemaster

We are one of the UK's biggest names in electric vehicle (EV) charging, trusted by thousands of owners, businesses and local authorities with the design, build and maintenance of high-quality charging units.

We're committed to accelerating the adoption of electric vehicles and making charging as fast and hassle-free as possible.

With a range of products for home, business, commercial and public use, as well as over 10 years' of experience, we're able to create the right charging solution for your needs. All of our products are developed and manufactured in the UK and carefully designed to match your needs, from hardware to aftercare.







## Charging on the Polar network

BP Chargemaster operates Polar, the UK's biggest public charging network, with over 7,000 charge points available across the country, giving electric vehicle drivers a convenient and reliable charging experience.

### Polar Plus - access our best value tariffs

Access our full network of over 7,000 charging points across the UK with our Polar plus subscription service for just £7.85 a month. This includes **free** charging on the majority of our charging points, with the rest charged on our best value tariffs and rewards with our Polar plus loyalty rewards scheme.

You'll also get the choice between an RFID card or key fob for simple and easy access to the Polar network, and all new individual members get the first **3 months membership for free\***



### Polar Instant - the pay-as-you-go app

You can also access our Polar network with our pay-as-you-go app or, on many of our rapid chargers, your contactless bank card. Just download our Polar Instant app to stop and start a charge from your phone or tap your contactless bank card on many of our rapid or ultra-fast charge points.

\*You will be charged for any electricity costs incurred, even during your free period of membership. The majority of our sites are free to use. For the others, you will be charged on a per kWh basis. To see which charge points have electricity costs, please see our live map.

## Supporting UK businesses

We're one of the UK's only end-to-end manufacturers, installers and operators of electric vehicle charging infrastructure. This means we can support businesses with on-the-go pure electric or mixed fleet charging, workplace charging infrastructure and employees' home charging needs.

### BP Fuel and Charge - for mixed fleets

For mixed fleets, BP offers a Fuel & Charge card in partnership with BP Chargemaster.

This works like a typical fuel card and allows drivers to pay for individual vehicles' electricity, petrol or diesel. With centralised billing and invoicing, drivers have access to 7,000 public charge points, 3,400 filling stations and any private workplace chargers.

### Polar Corporate - public charging fleet solution

For pure electric fleets, our Polar Corporate subscription lets your electric fleet access over 7,000 charge points across the UK.

With centralised billing and invoicing, as well as visibility of energy usage across the fleet, each membership costs just £6.54 per month (excl. VAT).

### Workplace Plus - your private business network

For your private workplace chargers, Workplace Plus makes controlling tariffs and monitoring utilisation simple.

Your employees have the choice to charge exclusively on your private network at tariffs designed by you or to incorporate their workplace charging into their new or existing personal Polar Plus membership.

The workplace charging grant can offer up to £500 per socket to businesses installing charging points at their site, saving up to £10,000 on charging infrastructure.

Please note, we take a fixed 25p fee every time a workplace charger is used.

# BP Chargemaster products

We make the future of electric motoring easy with a range of products for home, business, commercial and public use.

## Smartcharge

Charging speed: 3.7kW-7.4kW

Sockets: Single Type 2 AC (tethered or socket) or single Type 1

Access: Open or secured with key

Smart-enabled and comes with a three-year warranty included. Robust, weatherproof and eligible for the OLEV Electric Vehicle Homecharge Scheme grant.



## Powercharge

Charging speed: 3.7kW-7.4kW

Sockets: Dual Type 2 AC

Access: Open or secured with key

Available in both floor-standing or wall-mounted options. Sleek design and a cost-effective charging solution for your business.



Our charging points are developed and manufactured in the UK, carefully designed to match your needs. All of our products are also backed by a comprehensive three-year warranty and after-sales support

## AC charging

Charging speed: 3.7kW-22kW

Sockets: Dual type 2

Access: RFID or Polar Instant PAYG app

Available in both floor-standing and wall-mounted options, our destination chargers are ideal for a top-up or if you're staying somewhere for longer.



## Rapid charging

Charging Speed: 50kW DC and 43kW AC

Sockets: Tethered 50kW CHAdeMO, 50kW CCS and 43kW Type 2 AC

Access: RFID, Contactless bank card or Polar Instant PAYG app

Fully integrated cables, intuitive touchscreen interface and multiple payment options make charging easy and hassle-free.



# Smartcharge

## Your home charging unit



To make the most out of your plug-in or electric vehicle, it's important to have a Homecharge installed. Three times faster than using a domestic plug to charge and Smart enabled meaning they're eligible for the OLEV Electric Vehicle Homecharge Scheme grant\*.

- Our units are waterproof and supplied with a three-year warranty as standard
- Choose between a socketed or a tethered unit to best suit your needs
- Quick and easy to install by one of our trusted electricians
- Start and schedule charging via the Smartcharge app or web portal, helping you make the most of your electricity tariff and lifestyle
- Choose the power output, connection type, data and security options that suit you best
- Protects your car with advanced overload protection and electric current management software
- Monitor your historic data usage and view detailed reports with access to ChargeVision

\*The OLEV Electric Vehicle Homecharge Scheme grant terms and conditions apply. To find out more, visit <https://www.gov.uk/government/publications/customer-guidance-electric-vehicle-homecharge-scheme>. Not applicable to Channel Islands.





## Smartcharge



Charging Unit Model	3.6kW Single Phase	7kW Single Phase
AC Charging Output	3.6kW 16A @230v	7.36kW 30A @230v
Input Voltage	230v AC	
Input Current	16A	30A
Outlet EV Connectors	Type 2 (EN62196) socket: Tethered Type 1 (J1772); Tethered Type 2	
Safety Protection (RCD)	30A Type B RCD and integrated DC fault current (compliant with BS 7671:2018)	
Environmental Protection	IP54 (EN60529:1992 + A2:2013)	
RFID Access Tag Standard	ISO / IEC 14443A	
Control	'Mode 3' SELV DC & PWM control signalling, conforming to ISO/IEC 61851-1 Annex B, validated by Mercedes, BMW, Nissan, Renault, Mitsubishi, Toyota, Kia, PSA, Jaguar Land Rover, VW, Tesla, Smart, Ford, Volvo	
Wireless Communications	GPRS Cellular Data Network Radio Equipment Directive	
Network Communications Protocol	TCP/IP 2 way communication with secure central server	
Network Security	HTTPS, 128 bit encryption	
Min Operating Temperature Range	-20°C to +40°C (LCD Display remains fully operational at -20°C but may have a slower response below 0°C)	
Operating Humidity	To 95% RH Non-condensing	
EMC Compliance	EN 61000-6-3:2007, EN 61000-6-2:2005	
Safety Compliance	Low Voltage Directive (LVD)2014/35/EU, EN 60950-1:2006 + A11 + A1, EN 60950-22:2006	
EV Charging Compliance	EN 61851-1:2001, EN 61851-21:2002, EN 61851-22:2002, IEC 62196-1, BS 7671:2018 (IEE 18th Edition)	
ZE READY	ZE 1.2 ready, which must be specified at time of ordering	
Pay As You Go Service	See the additional service description document	
Warranty	Comprehensive three years' parts and labour warranty included as standard	
Dimensions (H x W x D)	214mm by 354mm by 120mm	
Colour	White	
Smartcharge Feature	Server-controlled variable load limit	

# Powercharge

Reliable electric vehicle charging  
at your work place



Sleek design and cost-effective, the Powercharge floor-standing or wall-mounted unit lets businesses offer reliable electric vehicle charging to employees and customers.

- Dual Type 2 AC outlets offering Mode 3 charging
- Available with charging speeds from 3.7kW-7.4kW
- Open access to all EV drivers, no card or key required to start charging
- Designed and manufactured in the UK
- Floor-standing or wall-mounted options available to suit your premises
- Easy and cost-effective to install by our qualified electricians



# Powercharge

Input	
Input Voltage	230V
Phase	Single Phase
Input Power	14kW
Input Current	60A
Connection Requirement	80A/30mA RCBO or 80A MCB and 30mA RCD in the customer's distribution board Onboard 6mA DC fault current detection.

Electrical Output per socket outlet:	
Output charging power	7kW (with the option for 3.6kW)
Output voltage	230V
Output current	30A

Output	
Output charging connector	IEC 62196-2 Type 2

Electrical Safety	
Operating Temperature range	-25 °C to +55 °C
Operating Humidity range	5% to 95% non-condensing
Standard Compliance	EN 60950, IEC 61851, EN 61000-6-1 2007; EN 61000-6-3 2007
IP rating	IP54

Dimensions, weight and material	
Max width	220mm
Max height floor-standing	1242mm
Max height wall-mounted	830mm
Depth	120mm
Shipping weight	Typically 11.5 kg gross, 11.0 kg net
Material	Aluminium extrusion
Paint Finish	Powder Coat



# Onecharge

## Single Socket Electric Vehicle Charging Unit



Designed for destination charging, this stylish and unobtrusive charging unit is our quickest and most cost effective charger to install. Perfect for providing longer-stay or overnight charging.

- Fitted with one 'Type 2' socket for charging one vehicle at a time.
- Choose from 3.6kW & 7kW charging capacity.
- Intelligent units offer users charging sessions controlled via RFID card or mobile app access. They communicate to our back-office server via GPRS, enabling access to data usage.
- Smartcharge feature offers dynamic load-limit control via charge point management system, allowing integration with energy provider back offices.
- Integrated DC fault current detection.
- Free access to chargevision, our advanced online usage monitoring and reporting system.
- Exclusive access via personalised RFID card for the unit.
- Reliability you can trust, thanks to precision engineering, rigorous testing and quality controls.



# Onecharge

Charging Unit Model	O3 3.6kW Single Phase	O7 7kW Single Phase
AC Charging Output	3.6kW 16A @230v	7.36kW 30A @230v
Input Voltage	230v AC	
Input Current	16A	30A
Outlet EV Sockets	Type 2 (EN62196) socket	
Safety Protection (RCD)	30A Type B RCD and integrated DC fault current (compliant with BS 7671:2018)	
Environmental Protection	P54 (EN60529:1992 + A2:2013)	
RFID Access Tag Standard	ISO / IEC 14443A	
Control	'Mode 3' SELV DC & PWM control signalling, conforming to ISO/IEC 61851-1 Annex B, validated by Mercedes, BMW, Nissan, Renault, Mitsubishi, Toyota, Kia, PSA, Jaguar Land Rover, VW, Tesla, Smart, Ford, Volvo	
Wireless Communications	GPRS Cellular Data Network Radio Equipment Directive	
Network Communications Protocol	TCP/IP 2 way communication with secure central server	
Network Security	HTTPS, 128 bit encryption	
Min Operating Temperature Range	-20 °C to +40 °C (LCD Display remains fully operational at -20 °C but may have a slower response below 0 °C)	
Operating Humidity	To 95% RH Non-condensing	
EMC Compliance	EN 61000-6-3:2007, EN 61000-6-2:2005	
Safety Compliance	Low Voltage Directive (LVD) 2014/35/EU, EN 60950-1:2006 + A11 + A1, EN 60950-22:2006	
EV Charging Compliance	EN 61851-1:2001, EN 61851-21:2002, EN 61851-22:2002, IEC 62196-1, BS 7671:2018 (IEE 18th Edition)	
ZE READY	<b>ZE 1.2 ready , which must be specified at time of ordering</b>	
Pay As You Go Service	See the additional service description document	
Warranty	Comprehensive three years' parts and labour warranty included as standard	
Dimensions (H x W x D)	214mm by 354mm by 120mm	
Colour	White	
Smartcharge Feature	Server-controlled variable load limit	

# Fastcharge Floor or Wall Mounted

Cost-effective and easy to use



Our Fastcharge range of 3.7kW-22kW AC chargers are designed for high activity commercial or public locations. Cost-effective to install, these units are suited to parking areas for a top-up charge or at restaurants and hotels for a longer stay.

- Dual Type 2 outlets to charge two vehicles simultaneously
- Available with charging speeds from 3.7kW-7.4kW (single phase) or 11kW-22kW (three phase)
- Accessed via a Polar Plus RFID card or our Polar Instant pay-as-you-go app
- Free access to ChargeVision, our advanced online usage monitoring and reporting system
- Option to use with third-party back office systems using OCPP
- Durable and robust to take on the challenge of high-utilisation areas
- Option to be part of the UK's largest public charging network, Polar, with over 7,000 charge points nationwide
- Can be floor or wall-mounted to best suit the capacity or needs of t



# Fastcharge

Charging Unit Model	F3 / W3 3.6kW Single Phase	F7 / W7 7.4kW Single Phase	F11 / W11 11 kW Three Phase	F22 / W22 22kW Three Phase
AC Charging Output	2 x 3.6 kW (2 x 16A) @ 230v	2 x 7.36kW (2 x 32A) @ 230v	2 x 11 kW (2 x 16A/phase) @ 400v between phases; 230v phase to neutral	2 x 22 kW (2 x 32A/phase) @ 400v between phases; 230v phase to neutral
Input Voltage	230v AC		400vAC between phases	
Input Current	64A Split load configuration with separate connections for 2 x 32A		64A per phase Split load configuration with separate connections for 2 x 32A per phase	
Over Current Protection	2 x 40A MCBs curve D		2 x 3 phase 40A MCBs curve D	
Outlet EV Sockets	2 x Type 2 (EN62196)			
Safety Protection (RCD)	2 x 30mA Type B RCDs			
Environmental Protection	IP54 (EN60529:1992 + A2:2013)			
RFID Access Tag Standard	ISO / IEC 14443A			
Control	'Mode 3' SELV DC & PWM control signalling, conforming to ISO/IEC 61851-1 Annex B, validated by Mercedes, BMW, Nissan, Renault, Mitsubishi, Toyota, Kia, PSA, Jaguar Land Rover, VW, Tesla, Smart, Ford, Volvo			
Wireless Communications	GPRS Cellular Data Network Radio Equipment Directive			
Ethernet Communications	Ethernet connection (replacing wireless) available at no extra cost; please specify at time of ordering			
Network Communications Protocol	TCP/IP 2 way communication with secure central server			
Network Security	HTTPS, 128 bit encryption			
Min Operating Temperature Range	-20°C to +55°C (LCD Display remains fully operational at -20°C but may have a slower response below 0°C)			
Operating Humidity	To 95% RH Non- condensing			
EMC Compliance	EN 61000-6-3:2007, EN 61000-6-2:2005			
Safety Compliance	Low Voltage Directive (LVD) 2006/95/EC, EN 60950-1:2006 + A12, EN 60950-22:2006			
EV Charging Compliance	EN 61851-1:2001, EN 61851-21:2002, EN 61851-22:2002, IEC 62196-1,			
ZE READY	ZE 1.2 ready , which must be specified at time of ordering			
OCPP	OCPP 1.5 compliant where option requested			
Pay As You Go Service	See the additional service description document			
Warranty	Comprehensive three years' parts and labour warranty included as standard			
Dimensions (H x W x D)	1400mm by 366mm by 254mm			



# Ultracharge 50kW

Rapid charging on the go



When you need a quick charge on the go or if speed is paramount, our rapid chargers offer a convenient and innovative way to charge. We have the largest public network of rapid chargers in the UK and all of our units are designed and manufactured in the UK.

- Fully integrated tethered cables with 50kW CHAdeMO, 50kW CCS and 43kW AC connections
- Intuitive and user-friendly touchscreen interface
- Runs from a three-phase 400V/80A supply per phase
- Able to connect to OCPP compliant back-office systems
- Three-year electronics warranty and 10-year chassis and housing warranty as standard
- Accessible via Polar Plus RFID card or Polar Instant pay-as-you-go app. All of our newly installed rapid chargers also accept contactless bank card payment and we're retrofitting our existing network with contactless technology





# Ultracharge

AC Input		AC Output	
Input Voltage	400V AC 3P+N+E	Output Voltage	400V AC 3P+N+E
Nominal Input Current	74A (on each phase)	Rated Output Current	63A
Current THD	IEC 61000-3-12	Rated Output Power	43kW
Rated Input Power	55kW	DC Output	
Input Frequency	50Hz	Output Voltage	200 – 500V DC
Power Factor	>0.98	Rated Output Current (max)	125A
Efficiency	>95%	Rated Output Power	50kW
Electrical Safety		Environmental	
Residual Current, Earth Fault	RCD Type B	Operating Temperature	-30 to +50°C
Over Current	MCB	Max Humidity	95% RH non condensing
Over Voltage	Over Voltage Detection	Operating Noise	<45 dBA
Short Circuit	Short Circuit Detection and MCB	Thermal Management	Thermostatically controlled fans
Emergency Stop	Emergency Stop Button		
Connector Type		Enclosure	
Combined Charging System (CCS)	CCS Combo 2	Materials	Stainless steel and composite plastics
CHAdEMO	CHAdEMO JEVS G105	Ingress Protection	IP54
AC	Type 2 tethered cable IEC 62196	Impact Resistance	IK10
General		Network Connection	
RFID System	ISO 14443A 13.56MHz	Wireless	GPRS/GSM M2M
User Interface	12.1" widescreen sunlight optimised full colour LCD with PCap touchscreen under toughened vandal resistant glass	Ethernet	10/100BaseTX
LED Indication	Blue – Available. Green – In Use	Communication Protocol	OCPP v1.5. OCPP v2.0 on release
Contactless Credit Card Payments	Optional	Compliance	
Number Plate Recognition System	Optional	CCS	IEC 61851-1, IEC 61851-23 annex C, ISO 15118, DIN 70121
Dimensions	1500h x 800w x 640d mm (max)	CHAdEMO	CHAdEMO V1.0, IEC 61851-1, IEC 61851-23 annex A
Weight	195kg	AC 43kW	IEC 61851-1, IEC 61851-2 2, IEC 61851-11 annex A IEC 62196

# Questions about the Workplace Charging Scheme?

## How much can I save?

The UK government offers a grant of £500 per socket installed for up to 20 sockets. This means you could save up to £10,000 on charging infrastructure at your workplace.

## How do I apply?

You'll need to apply online at [www.apply-workplace-chargepoint-grant.service.gov.uk](http://www.apply-workplace-chargepoint-grant.service.gov.uk) using the reference number BP Chargemaster provide. You'll be issued with a voucher for the grant funding that we can then deduct from your final invoice.

## Is there anything else I need to know?

To qualify, the charge point must be installed by an approved installer and the charge point itself must be a communicating unit. Once the voucher has been received, we'll also need to complete installation within four months of the claim.

## Want to know more?

If you have any other questions or would like to find out more, one of our advisors will be able to help. You can get through to us by phone on 01582 399 413 or by email at [sales@bpchargemaster.com](mailto:sales@bpchargemaster.com)

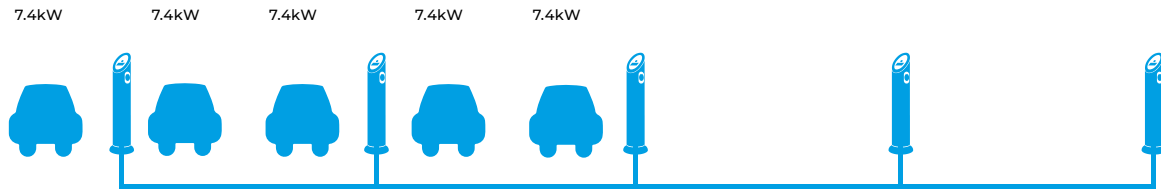


## Load Management

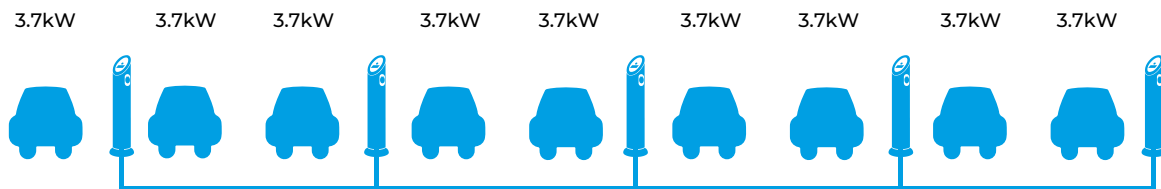
We understand that many work places don't have the required power for all charge points at site to be used simultaneously.

To support charging at your business, we offer Load Management software on our communicating Fastcharge range. This maximises the power supply available, ensuring you can charge as many electric vehicles as possible.

We're committed to increasing efficiency at your site to keep your electric vehicle fleet moving.



Typical available electric supply with five dual units



Typical available electric supply with five dual units all utilised

## Find out more

Visit us: **[www.bpchargemaster.com](http://www.bpchargemaster.com)**

Email us: **[heretohelp@bpchargemaster.com](mailto:heretohelp@bpchargemaster.com)**

Call us: **0330 016 5126**

BP Chargemaster is one of the only end-to-end manufacturers, installers and operators of electric vehicle charging infrastructure in the UK.

We operate the UK's largest public charging network, Polar, with over 7,000 public charging points.

We can fulfil all your charging needs. We provide charging solutions to business, governing bodies, work places and for the home.

