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EV Charge Online - Overview

The Open Networked EV Charging System

The EV Charge Online system has been designed and developed to enable each and every EV driver to simply pull up to a charge point and, using their mobile phone, tablet or in-car connectivity, log-in to the charge point and pay-as-you-go (PAYG) for its use.

The system has been developed to provide unrestricted and open charging access to all EV drivers via the secure Worldpay payment platform without the driver having to commit to joining any specific charging network and therefore avoiding unnecessary annual subscription fees, monthly membership fees and costly ongoing connection charges.

EV Charge Online is not only beneficial for the EV driver in so much as they only pay when they use the charge point, but also benefits the host who will no longer have to pay any licence fees and can have a charge point installed and operational quickly and easily by simply providing an electricity supply.

EV Charge Online has been specially designed to provide the host with a self-operating EV charging network requiring minimal management. On a monthly/quarterly basis the host will receive a report of their charge point network activity and a bank transfer of the funds generated by the charge points.



EV Charge Online - Overview

Element 1 - The EV Driver / Mobile Phone

Traditionally the EV driver has been forced into joining charge point network schemes with unnecessary and expensive annual memberships fees, monthly subscription fees and costly ongoing connection charges.

EV Charge Online has been designed so that each and every EV driver can simply pull up and, using their mobile phone, log on to the secure Worldpay payment platform, choose their payment method, i.e. Visa, MasterCard, American Express, PayPal, etc. and use the charge point without ever again having to pay these unnecessary membership, subscription fees and connection charges.

The EV driver simply pays for the charging cycle only!

Further features to benefit the EV driver include:

- Text/email alerts when the charge cycle is nearing completion
- A facility for waiting EV drivers to prompt the system via their mobile phone, to remind an absent EV driver that their charge cycle is complete requesting them to return to their vehicle and relocate



The EV Driver



EV Charge Online - Overview

Element 2 - The Payment Platform

Rolec EV has chosen Worldpay as its payment platform provider to securely manage all financial aspects between the EV driver, the EV Charge Online back office and the host.

Worldpay is a world leader in the provision of payment platforms and allows the EV driver to securely pay for the use of the charge point via their mobile phone, with a choice of payment methods, including Visa, MasterCard, American Express, PayPal, etc.

All driver/payment information is secure and confidential, being protected by Worldpay at bank security level.



EV Charge Online - Overview

Element 3 - Power Portal Back Office

Rolec EV has designed and developed a unique cloud-based back office, which is managed by Power Portal, specifically to support and monitor the EV Charge Online charge networks.

Power Portal is the nerve centre that links all the elements of the system together including the EV driver's mobile phone, the Worldpay payment platform, the EV charge points and the host's operating computer/bank account payments.

Power Portal's back office has been designed to manage EV charge points on any scale from a single charge point at a private location through to multiple charge points on a nationwide basis.



EV Charge Online - Overview

Element 4 - The Host

EV Charge Online has been developed specifically to make charge point management as easy as possible for the host.

The EV Charge Online charge point network is easy to install and set up, requiring in most cases a simple live, neutral and earth electricity supply, and can be installed in any location.

With EV Charge Online, the host does not have to pay any licence fees and receives what we believe to be the highest financial return per EV charge available on the market today.

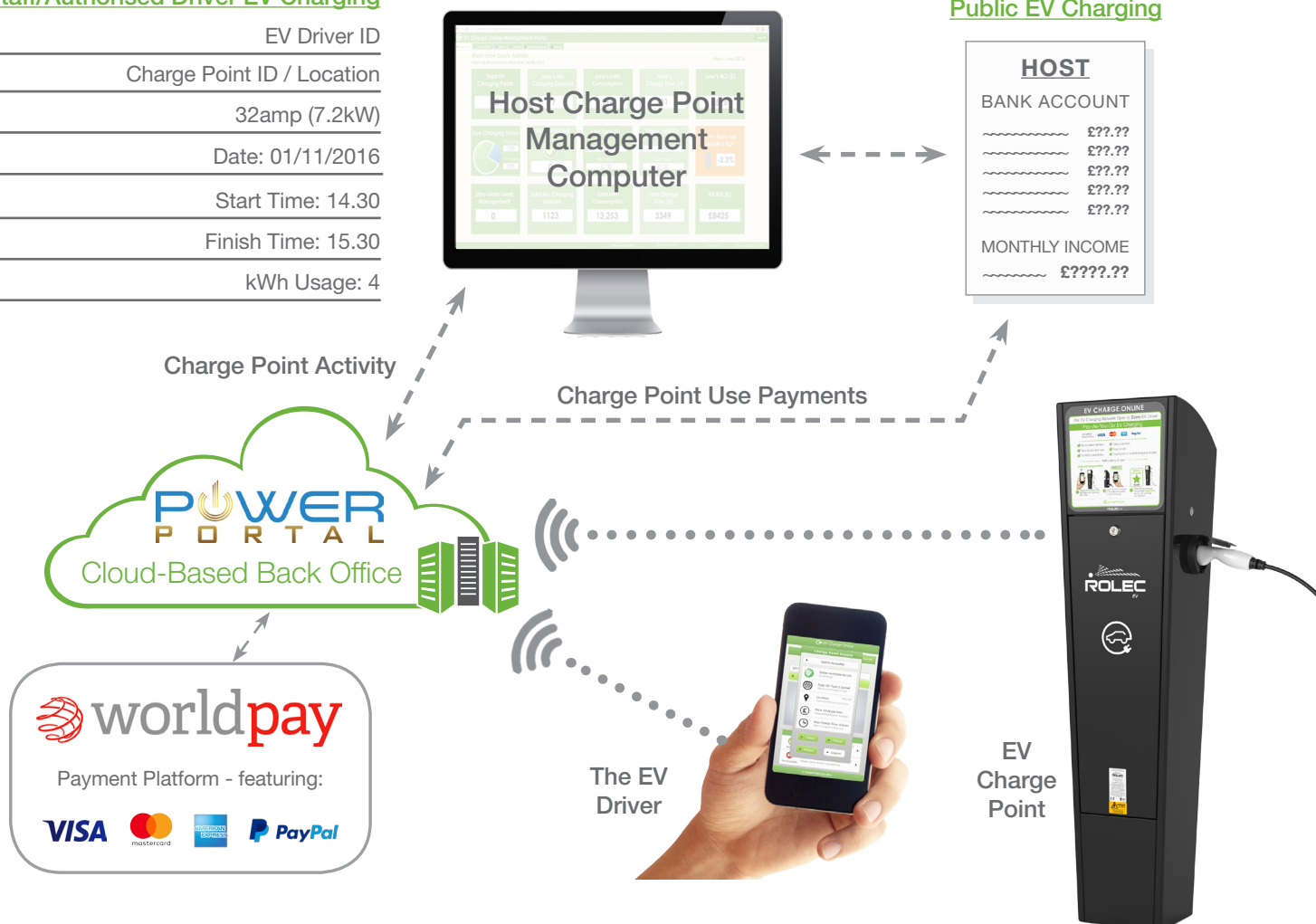
EV Charge Online is a versatile system primarily developed for public facing EV charging, but is also able to offer a private EV charge network option. This private network option allows administrators to pre-authorise members of staff or other specific EV drivers with the use of the EV drivers' unique email address. This allows the administrator to easily add and remove individual members from private network groups with set parameters, at any time. This permits these specific EV drivers to charge their car using the same EV charging points without having to make any financial transfer. All charging activity is then recorded for analytical purposes, billing, benefit-in-kind, etc.

Staff/Authorised Driver EV Charging

○	EV Driver ID
○	Charge Point ID / Location
○	32amp (7.2kW)
○	Date: 01/11/2016
○	Start Time: 14.30
○	Finish Time: 15.30
○	kWh Usage: 4













Public EV Charging

HOST	
BANK ACCOUNT	
~~~~~	£???.??
~~~~~	£???.??
~~~~~	£???.??
~~~~~	£???.??
~~~~~	£???.??
MONTHLY INCOME	
~~~~~	£?????.??



EV Charge Online - Host Benefits

Why Choose EV Charge Online?

	AFFORDABLE	The most competitively priced public facing EV charging pedestals in the UK
	NO LICENCE	Designed so the host does not have to pay any licence fees
	HIGHER RETURNS	Believed to be the highest financial returns per EV charge available on the market today
	DIRECT PAYMENTS	Monthly/quarterly payments made directly into the host's bank account of funds generated by the charge point
	EASY TO INSTALL	Only requires an electricity supply and its ready to charge – in any location (subject to mobile phone signal)
	EASY TO MANAGE	Once commissioned and set up, EV Charge Online is practically self-operational
	FLEXIBLE	Flexible design allows you to operate a single charge point through to multiple charge point networks
	PUBLIC FACING	Each and every EV driver can use the charge point via their mobile phone
	PRIVATE NETWORK	Optional ability to accommodate private network schemes, i.e. staff, members, etc.
	RELIABILITY	Tried and tested technology, produced by a company with 25 years' manufacturing experience
	MAINTENANCE	Minimal maintenance required
	BRANDING	Optional corporate branded charge points available (corporate colours, logos, etc.)

EV Charge Online - Driver Benefits

Why Drivers Benefit From EV Charge Online

- ✓ No annual membership fees
- ✓ No monthly subscription fees
- ✓ No ongoing costly connection fees
- ✓ No requirement to carry multi-scheme RFID cards or fobs ever again
- ✓ Every EV driver with a mobile phone can use the EV Charge Online system
- ✓ User-friendly, intuitive system accessible from your mobile phone
- ✓ Stores your "Favourite" / most used charging points for fast-track charging
- ✓ Secure payment platform provided by Worldpay
- ✓ Pay-to-Charge via Worldpay using Visa, MasterCard, American Express, PayPal
- ✓ Email alerts to your mobile phone when charging is nearing completion
- ✓ Email reminders to your mobile phone advising that charging is complete and to return to vehicle to relocate
- ✓ EV Drivers can monitor their charging cycle using their mobile phone

Compatible with all makes of EV



and many more...



EV Charge Online - Connectivity

EV Charge Online has been designed to operate using a number of communication formats, including cabled Ethernet, wireless GSM/GPRS and Wi-Fi connectivity. As well as being able to operate unilaterally on each of these systems, you can also mix and match the connectivity methods to suit your charging network environment, e.g.

Charging Pedestal Connectivity

- Charge Point —————> GSM/GPRS —————> Power Portal
- Charge Point —————> Ethernet —————> Power Portal
- Charge Point —————> Wi-Fi —————> Power Portal

EV Driver's Mobile Phone Connectivity

- Mobile Phone —————> GSM/GPRS —————> Power Portal
- Mobile Phone —————> Wi-Fi —————> Power Portal

ETHERNET

Normally the charge point would be connected to the Power Portal back office via a GSM/GPRS signal. However, in the event of a poor signal, i.e. an underground car park, etc. an Ethernet cabled system can be installed to connect the charge point to the Power Portal.

The Ethernet system is able to connect to a standard 10/100BASE-T Ethernet structured network via CAT5/ RJ45 cabling.

This network should be designed in accordance with the standard parameters of Ethernet networking, e.g. cable lengths of less than 90m between connections to active components.

WI-FI

EV Driver Mobile Phone Connectivity

In the event of a poor GSM/GPRS signal at the charge point location, the host could in certain circumstances install a Wi-Fi connection that allows the EV driver using their mobile phone to logon to the Wi-Fi network in order to connect to the Power Portal back office and facilitate the payment for an EV charging cycle.

Charge Point Connectivity

In the event of a poor GPRS signal at the charge point location and the inability to install an Ethernet cabled system, the host could in certain circumstances, install a Wi-Fi connection that enables the charge point to logon to the Wi-Fi network in order to connect to the Power Portal back office.

GSM/GPRS

In the majority of cases, EV Charge Online's connectivity between charge point and Power Portal back office and EV driver's mobile phone and Power Portal back office would be facilitated via a GSM/GPRS connection.

In the event that a GSM/GPRS signal is not available, the connectivity can be made by either Ethernet or Wi-Fi as mentioned above.

SIM CARDS

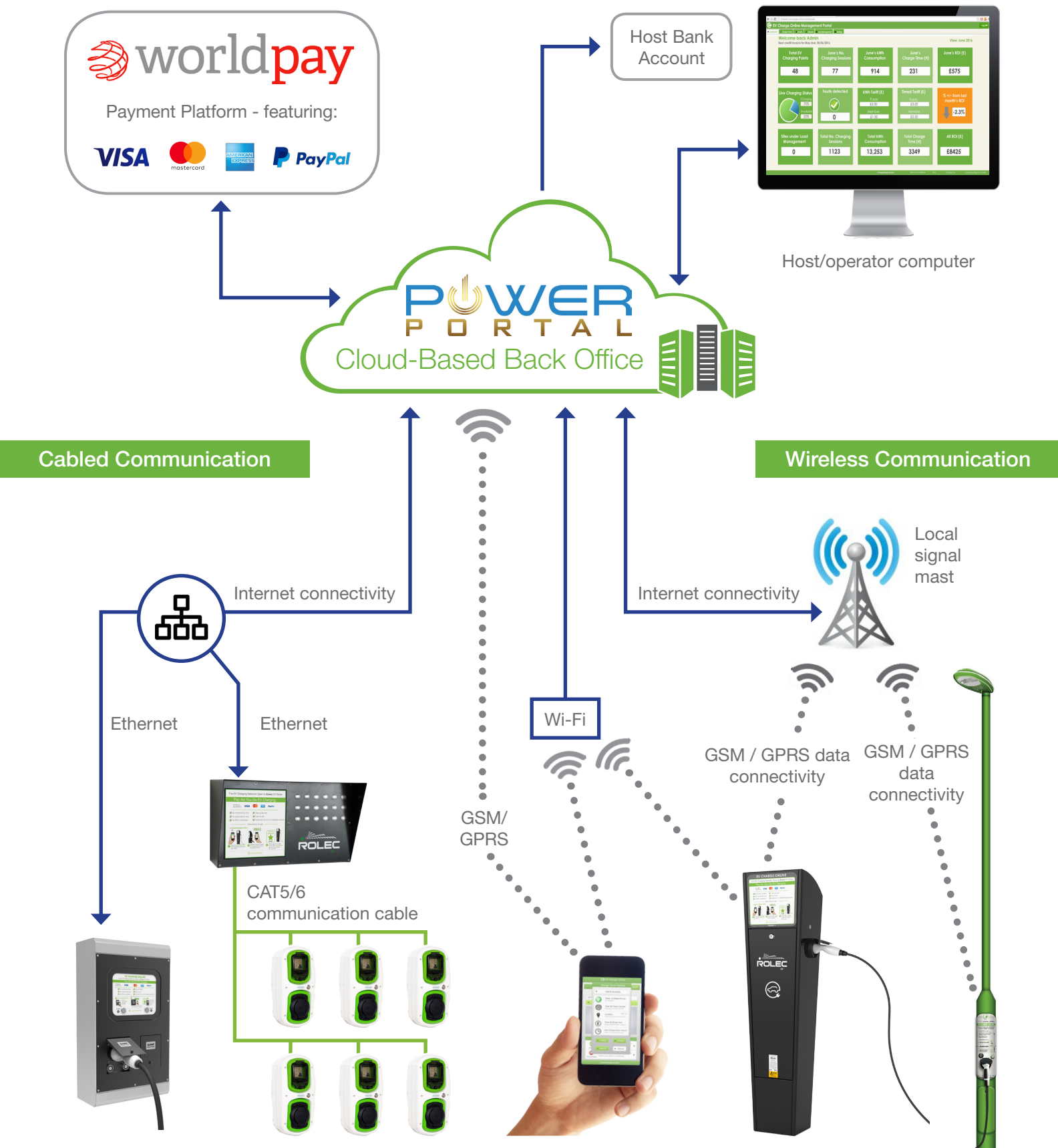
The EV Charge Online system uses roaming SIM cards that are able to lock on to the strongest mobile phone network provider in the area at any given time in order to maximise network connectivity.

SIGNAL ANTENNAS

All EV Charge Online charge points come complete with a standard external antenna in order to lock on to the strongest mobile phone signal available.

An optional stronger high gain antenna can be provided in the event of a weak local signal.

EV Charge Online - Connectivity Diagram



EV Charge Online - Charging Points

EV Charge Online is compatible with an extensive range of Rolec EV's charging points, including AutoCharge Pedestals, SecuriCharge Wall Units, EV ControlCentres and the EV StreetCharge Post. All of these charging points have been specifically designed and manufactured for both commercial and public facing environments and are pre-wired and ready for immediate installation.

All of Rolec EV's charging points are IEC 61851-1 Mode 3 communication compliant, are compatible with all available EVs and PHEVs, and can be branded in keeping with your corporate requirements.



ROLEC EV AUTOCHARGE PEDESTALS

- Manufactured in heavy duty, vandal resistant Cromweld steel, powder coated black as standard
- Uses IEC62196 (type 2) Mode 3 charging sockets
- Optional socket lockaway facility
- Available in 1way and 2way charging options
- Charging available in:
 - 16amp (3.6kW) / 32amp (7.2kW) single phase (fast charge)
 - 16amp (11kW) / 32amp (22kW) three phase (superfast charge)
- Dimensions H 1275mm x D 250mm x W 330mm



ROLEC EV SECURICHARGE WALL UNITS

- Manufactured in heavy duty, vandal resistant Cromweld steel, powder coated light grey body/dark grey fascia as standard
- Uses IEC62196 (type 2) Mode 3 charging sockets
- Available in 1way and 2way charging options
- Charging available in:
 - 16amp (3.6kW) / 32amp (7.2kW) single phase (fast charge)
 - 16amp (11kW) / 32amp (22kW) three phase (superfast charge)
- Dimensions H 575mm x D 155mm x W 320mm

EV Charge Online - Charging Points

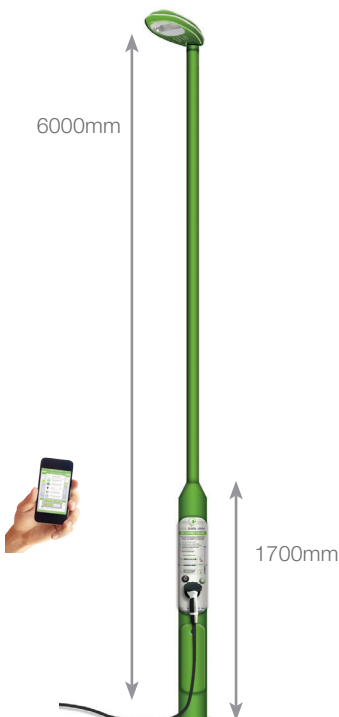
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All of Rolec EV's charging points are IEC 61851-1 Mode 3 communication compliant, are compatible with all available EVs and PHEVs, and can be branded in keeping with your corporate requirements.



ROLEC EV CONTROLCENTRE (IDEAL FOR UNDERGROUND CAR PARKS)

- Manufactured in heavy duty, vandal resistant Cromweld steel, powder coated black as standard
- Available as a 6way, 12way or 18way version
- Compatible with the entire Rolec EV charging product range



ROLEC EV STREETCHARGE (IDEAL FOR ON-STREET CAR PARKING)

- Incredibly hard-wearing and impact resistant, comes in green (RAL6018) as standard
- Uses IEC62196 (type 2) Mode 3 charging sockets
- Comes c/w IP66 54W LED Lantern
- Instructional fascia at user-friendly height
- Available in 1way
- Charging available in:
 - 16amp (3.6kW) / 32amp (7.2kW) single phase (fast charge)
- Dimensions H 6000mm x Dia 192mm

Quality Products

Quality Manufacturing

Quality Control



ISO 9001
Certified



NICEIC Association
Member



Achilles
Certified



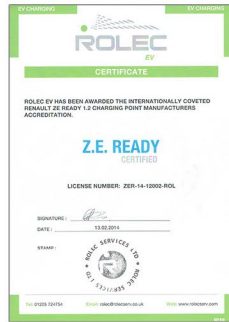
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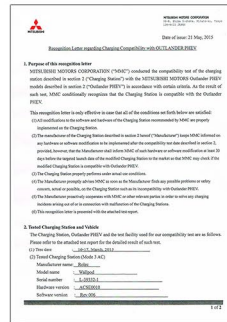
EVSE Association
Member



Nissan
Compatibility
Certificate



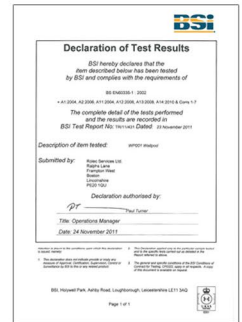
Renault ZE Ready
Compatibility
Certificate



Mitsubishi
Compatibility
Certificate



Hyundai / Kia
Compatibility
Certificate



EV Charge Point
In-Home Safety
Certificate

Our company Mission Statement of 'Quality, Reliability and Innovation' applies to all our divisions' products and services and our extensive client list continues to grow, with many of the world's leading companies relying on our products and services.



EV Charge Online

The Open Networked EV Charging System



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