

Discover the definitive low-cost solution for the massive deployment of electric vehicle charging infrastructure in public parking lots.

## THE CHARGING POINT

### Revolutionary design

Unique internal electro-mechanical design, enabling a low-cost solution for public parking lots.

### All in one

RFID card reader, MID power meter, 6mA RDC residual current sensor, RGB LED status indicator, 16x2 LCD



### Easy installation

Easy wire management and connection. Includes space for required protections according to local codes in most of the countries.

### Innovative socket

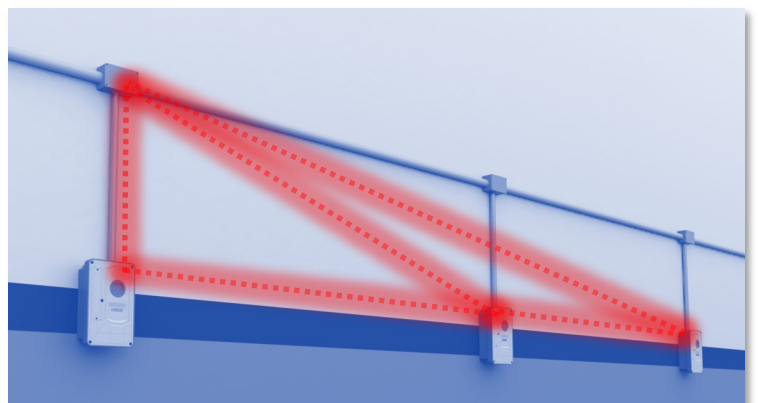
Integrated socket with a motorized shutter and interlock fulfilling the most restrictive safety regulations and allowing one hand connection of the charging cable

### Wireless connectivity

No communications cabling across the installation. A low-cost wireless mesh network will interconnect the charging points with a gateway.

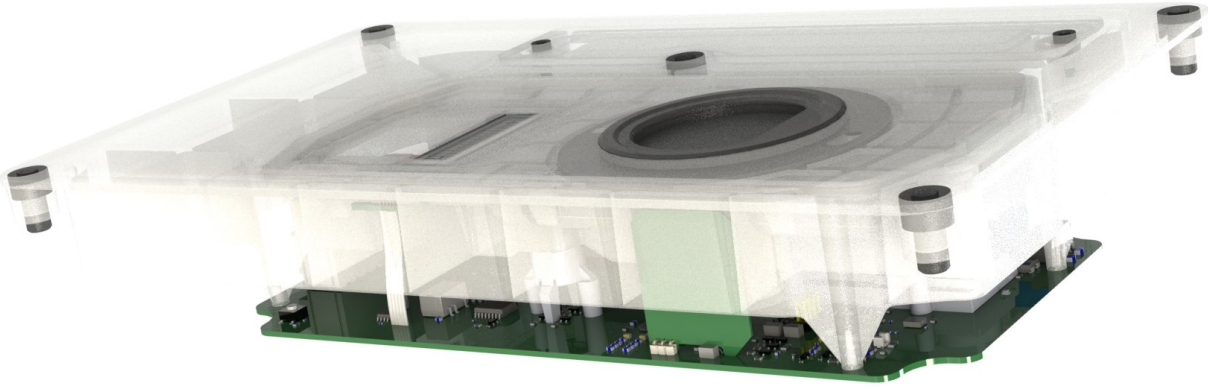
## Communication architecture: secure, wireless and costless

The solution features an innovative wireless mesh network that includes all charging points and at least one gateway. When the range of one emitting node is insufficient to reach the destination node, the charging points also function as repeaters, extending the message's range throughout the installation. The gateway oversees all network charging points and includes an OCPP 1.6J client to interact with the backend. All exchanged information is encrypted and protected against cyber attacks. This solution eliminates the need for communication cabling throughout the installation, thereby simplifying the setup and reducing the owner's investment costs



## Design: automated manufacturing for low-cost and high-quality mass production

The electromechanical design minimizes human labor to reduce costs and enhance production quality. This is achieved by using bus bars and printed circuit board conductors instead of the manually installed internal wires. The design also integrates all elements needed in a charging point to be installed in a public parking lot —such as the power meter, relay, socket, pilot function among others— into a single PCB unit. The result is a charging point with a simplified structure that can be manufactured on an automated production line.



PATENT PENDING (EU patent application number EP23383029).

## Technical specifications

Charger type	IEC 61851, AC, mode 3, indoor/outdoor installation
Supply connection	Single phase, L + N + PE
Rated voltage	230 V
Rated current	32A
Rated power	7,4 kW
EV connection	IEC 62196 type 2 socket with shutters and interlock
Human Machin Interface	RGB led indicator and 16 x2 LCD screen
Electric power meter	MID class I
RFID card reader	ISO/IEC 14443 A/MIFARE
Protections	6 mA residual current sensor according to IEC 62955 Optional built-in protections: > Transient and permanent overvoltage protection > Overcurrent/short-circuit MTCB > Type A residual circuit breaker

Communications	OCPP 1.6J (through the gateway ethernet port)
Enclosure degree pf protection	IP54
Enclosure impact resistance	IK10
External dimensions	218 x 352 x 107 mm
Operating temperature range	-10 to +50 °C
Operating humidity range	5 % to 95 % Non-condensation
Standard compliance	CE mark (LVD 2014/35/EU, EMCD 2014/30/EU, MID 2014/32/EU, RED 2014/53/EU) Electric vehicle supply equipment: IEC 61851-1 EMC: IEC 61851-21-2 Socket: IEC 62196-1, 62196-2 Power meter: MID class I