# Charging stations LS-4

## innovative technology in public space

The development of electricity-based technologies is rapid today.

More and more people recognize the benefits of electric cars and plug-in hybrids.

That is why it is so important to expand the charging infrastructure for them.

Charging stations LS-4 meet the stringent requirements for devices installed in public areas.

 $Recommended\ places\ of\ installation:\ public\ car\ parks,\ supermarkets\ and\ shopping\ centers,$ 

bus and train stations, restaurants, machine parks.



- Personalization and system integration
- Simplicity of usage
- Economical solution







- Mode-3 charging, AC current, Type 1 and Type 2 plugs
- For 1- and 3-phase network, TN-S, TT, IT systems
- Plug & play installation, simple and intuitive operation
- LED indicator for charger status





#### Construction of station

- housing made mainly of aluminum, locked with a key (compact version on request),
- LED indicator reading the device status (narrow strip around the top of the cover),
- standing assembly (screwing to the base standard, embedded in the ground) or wall mounting.



- Mode-3 charging, continuous power supply 16 A AC or 32 A AC (1- and 3-phase network, for each socket), charging power from 3,7 kW to 22 kW,
- version with two built-in, illuminated weatherproof sockets (connectors Type 2),
- version with two permanently connected 5 m long cables with a plugs (connectors Type 1 or Type 2).



#### **Built-in equipment**

- two intelligent charge controllers

   integration with the billing system

   (open protocol OCPP 1.5/1.6),
- Communication LAN and/or 4G network (for selected models),
- electronics supporting communication between the station and the connected car,
- two separate residual current circuit breakers
   (1- and 3-phase station, for each socket),
- meter for local electricity metering (for selected models),
- heater ("cold option").





#### Accessories, options

- RFID card reader,
- possibility to activate DLM dynamic load balancing (for each socket, accuracy up to 1 A for a group of max. 25 stations).



### Technical data: LS-4

Supply AC / charging	1-phase network	3-phase network				
Rated load current (category AC1)	16 A, 32 A / 230 V	32 A / 400 V				
Working charging current range (50 Hz)	616 A, 632 A	632 A				
Charging power	2 x 3,7 kW	2 x 11 kW or 2 x 22 kW				
Power consumption in stand-by mode	< 10 W/h					
Charging mode	Mode-3					
Vehicle connection BEV or PHEV (EN 62196)	2 x socket: connector Type 2 2 x cable with plug: connector Type 1, Type 2	2 x socket: connector Type 2 2 x cable with plug: connector Type 2				
Installation in power grid (IEC 60364-4-41)	TN-S, TT, IT system					
Built-in protection	1-phase network	3-phase network				
Residual current circuit breaker	MCB + RCCB Type A, DC monitoring	DC monitoring				
General data	1-phase network	3-phase network				
Dimensions (L x W x H)	1400 x 375 x 208 mm					
Weight	25 kg (2 x socket)					
Operating temperature	-25+40 °C (-35+40 °C in version "cold option")					
Cover protection category (EN 60529)	IP 44 (optional versions IP 54)					
Degree of mechanical strength (EN 60208)	IK 10					
Relative humidity	595%					
Indicator (LEDs)	green continuous - ready to charge green flashing 2-3 times - cable connected to the vehicle yellow flashing - reading the ID (identification) from the RFID card blue flashing - charging starting blue continuous - charging in progress red flashing - RFID not approved red continuous - reset protections yellow continuous - connect cable white continuous - sockets are not enabled					
Mounting (indoor / outdoor)	standing (bolting to ground, e.g. concrete) standing (embedded in the ground using an assembly kit) wall-mounted					
Approvals, directives, compliance with standards	CE, RoHS, MID, IEC 61851-1, IEC 61851-22, IEC TS 61439-7, IEC 60364-7-722					

#### Selection table: LS-4

Station	Built-in equipment			Network				
2 x socket (Type 2)	protection MCB + RCCB Type A	meter of energy	"cold option"	LAN	4G	RFID card reader	DC monitoring	Power [kW]
353566	yes	Modbus	yes	yes	-	yes	yes	2 x 3,7
353567	yes	Modbus	yes	yes	-	yes	yes	2 x 11
353568	yes	Modbus	yes	yes	_	yes	yes	2 x 22
353563	yes	Modbus	yes	optional	yes	yes	yes	2 x 3,7
353564	yes	Modbus	yes	optional	yes	yes	yes	2 x 11
353565	yes	Modbus	yes	optional	yes	yes	yes	2 x 22