

# Fast charging station **STATION - KEYWATT 50 kW**





www.ies-synergy.com

# **DC FAST CHARGING STATION** Universal, compact, AC/DC simultaneous charging



Compatible with photovoltaic installations Smart Charging functiion for energy savaings

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# STATION - KEYWATT 50 Multi-Standard



#### Overview

- > Universal Multi-Standard 50 kW Charging Station for EVs
- > Combo 2 and/or CHAdeMO and/or AC Type 2 (22kW or 43kW optional)
- > Simultaneous charge AC and DC
- > KEYWATT hermetic design, without air filter and low maintenance
- > Easy installation and implementation into public places
- > Dual modem for operation & maintenance supervision
- > 7" Touch screen display
- > Remote & smart power management via OCPP 1.6 or Ethernet
- > Easy customization (Front Panel sticker + Menu Graphics)
- > Payment terminal included for Dual and Multi 43 KVA AC



Robust & Field Proven



Low Cost of Ownership



KEYWATT Services



## Available charging protocols





Combo 1/2 CHAdeMO



AC Type 2 22 KW (43 kW optional)

### Main applications

- > Destination charging
- > EV infrastructure and Operators
- > Public Stations
- > Service Providers
- > Car Dealerships

#### Main features

With a delivered power of 50 kW (in DC) or 22/43 kW (in AC), the new KEYWATT 50 Station will charge all EVs on the market in 30 min typically. Two charging points are available thanks to the simultaneous charge capability. Based on the KEYWATT<sub>TM</sub> hermetic design without air filter, maintenance needs are greatly reduced and service continuity optimized. Connected to a centralized network by wire or through air via OCPP1.6, the delivered output power can be adjusted on-line for smart charging.



#### INPUT

Voltage : 380-480 VAC 50/60Hz 3 Phase (3P + N + Ground)

Nominal input current: 83 A

Power factor: > 0,98

Efficiency: 94%

#### OUTPUT

Voltage: 200 VDC to 500 VDC

Current: 1,5 to 125 A

Max output power: DC 50 kW, AC 22 kW (43 kW option)

#### HARDWARE PROTECTIONS

Input fuses on each module

Output diode and fuse on power module

Fast acting fuses on output

AC input and DC output relays

#### OPERATING TEMPERATURE

Temperature: -25°C to +50°C (derating above 35°C) Relative Humidity: 10% to 95%

#### ELECTRONIC PROTECTIONS

Overload and output short-circuit

Over temperature and temperature regulation

Output over voltage / reverse polarity

Charging plug defects / Communication failure

#### Insulation monitor device on DC output COMMUNICATION BUS

COMBO 2 and/or CHAdeMO and/or AC Type 2

AC Type 2 – 22 kW T2S or 43kW Cable (optional)

Cable length : 4 meters (DC), 5 meters (AC 43kW)

CARACTERISTIQUES MECANIQUES

Dimensions : H 1,800 x L 600 x I 814

Weight: 350 kg

IP level: 55 / Shock resistance: IK10 (Screen IK08)

# Communication & Functions

#### Vehicle Interface:

- CAN (CHAdeMO / GB)
- PLC GreenPhy (COMBO & AC)

#### Supervision capability:

- Compatible OCPP 1.6
- Ethernet or 3G/4G modem
- 2 separate modems (Maintenance & Operation)

#### Access & identification:

- RFID reader (Mifare + Calypso)
- Payment terminal for Dual and Multi 43 KVA AC (EU)

#### Functions:

- Smart Charging
- Reservation
- Simultaneous charge AC + DC

## Standard compliance

- Directive RED 2014/53/EU
- Directive EMC 2014/30/EU
- Directive LVD 2014/35/EU
- Charge: DIN70121
- Compatibility E.V. Ready



Shopping Centers



Restaurants



Parking Lots



**Public Stations** 



EV.READY



Car Dealerships



# Configuration & options

#### Customization:

- Factory configuration of the charging station to the operator (supervision, SIM card)
- Customizable logo on the 7 inch touchscreen
- IES Standard color front door
- Front door customizable on request (sticker)
- LED Indicators (RGB) for each output

#### Output options:

- Single Output: Combo 2
- Dual Output DC: Combo 2 + CHAdeMO
- Dual Output AC/DC: Combo 2 + AC 22 kW
- Multi Output: Combo 2 + CHAdeMO + AC 22 kW T2S (or AC 43kW optional)

CHAdeMO

