

# DHI-ICS-A220E-H2J-PEN

Overseas DH Intelligent EV Charge



## Series Overview

D-Volt Compact is a sleek and compact home EV charger designed for seamless integration into residential spaces. With its minimalist aesthetic and compact form, it combines elegant design with effortless installation and intuitive operation. Built with multiple layers of electrical protection, it delivers a safe, reliable, and user-friendly charging experience for everyday use at home.

## Functions

### Multiple Start Methods

Charging can be easily initiated through App, RFID or Plug and Play.

### Current Adjustment

The current can be adjusted from 6 A to 32 A. The EV Charger also has protection against overloads and safely uses home electricity, while providing fast charging at maximum power.

### Scheduled Charging

Charging can be scheduled and energy levels customized. By selecting the most convenient charging periods, you can reduce electricity costs and ease the load on the power grid. Additionally, you can tailor the amount of energy for charging your vehicle based on the actual demands of its battery. This approach minimizes float charging and helps protect the battery.

### Intelligent Operation and Maintenance

Supports error alarms, OTA update, DSO control, remote control and restart.

- 3 charging modes: Authentication-free charging (plug & play), RFID card swiping, and app control.
- Supports OCPP 1.6J.
- Working temperature: -30 °C to +50 °C (-22 °F to +122°F).
- Integrated 30 mA Type A and DC 6 mA RCD function protection; supports PEN protection.
- Supports Dynamic Load Balancing and Solar Charging.
- Offers multiple protection functions.
- 3-year warranty.

## Protection Capabilities

Comes with protection against overvoltage, undervoltage, overcurrent, short circuits, lightning surges, electric surges, leakage, overtemperature, metering failure, CP disconnection, and vehicle PE disconnection. It can also detect relay sticking and LN reverse connection, and offers grounding protection, PEN protection, and data security. The EV Charger is also dustproof and waterproof so that you can feel secure and comfortable while using it.

## Scene

Suitable for installation in homes to charge new energy vehicles.

Technical Specification

|                               |               |
|-------------------------------|---------------|
| Electrical                    |               |
| Rated Power                   | 22 kW         |
| Input Voltage                 | 400 VAC ± 15% |
| Rated Input Frequency         | 50/60 Hz      |
| Output Voltage                | 400 VAC ± 15% |
| Output Current                | Max 32 A      |
| Standby Power Consumption     | ≤5 W          |
| Power System Type             | TN-S,TT       |
| Input Cable Connection Method | L1/L2/L3/N/PE |
| Input Current                 | Max 32 A      |

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Basic                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Charging Mode        | Mode 3 (EN/IEC 61851)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Leakage Protection   | Type A + DC 6 mA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Security Protection  | Overvoltage protection, undervoltage protection, overcurrent protection, short circuit protection, lightning protection, surge protection, leakage protection, grounding protection, overtemperature protection, relay stuck detection, CP disconnection protection,IP,IK,data security protection, LN reverse connection protection, flame-retardant protection, shutter protection against accidental touches,PEN (Protective Earth and Neutral) protection, measurement protection, tamper-protection, network security protection |
| Communication        | <ul style="list-style-type: none"><li>• Wi-Fi 6 802.11b/g/n/ax (2.4 GHz)</li><li>• 802.11a/n/ac/ax (5 GHz)</li><li>• RFID ISO/IEC 14443 A (Type A, 13.56 MHz)</li><li>• RJ-45 Ethernet connection</li><li>• Bluetooth Low Energy (BLE 5.0) 2402–2480 MHz (for installer configuration purposes)</li><li>• OCPP 1.6J</li><li>• 4G LTE Cat-1 (nano SIM) (Optional)</li></ul> LTE FDD: B1/B3/B5/B7/B8/B20/B28                                                                                                                            |
| Connection Mode      | Socket (Supports Shutter)/5 m (16.40 ft) Cable, Type 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| ROHS                 | ROHS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Measurement Accuracy | Meter IC, ±1%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Warranty             | 3 years                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

|                        |                                                                                                                                                                                                                               |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Function               |                                                                                                                                                                                                                               |
| Startup Method         | App/Plug & Play/RFID                                                                                                                                                                                                          |
| Status Indicator Light | Yellow (Starting)/Green (Standby)/Flashing blue (Charging)/Flashing green (The charging cable has been connected, or after successful card authentication,or charging finished)/Flashing red (Charging fault)/Blue (Reserved) |
| Upgrade Method         | USB upgrade and remote upgrade (OCPP 1.6J)                                                                                                                                                                                    |

|              |                                                                                                                                          |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Structure    |                                                                                                                                          |
| Material     | <ul style="list-style-type: none"><li>• Unit – PC/ABS Alloy, flammability rating UL94-V0</li><li>• Heat Sink – Aluminium alloy</li></ul> |
| Installation | Wall mount and vertical pole mount                                                                                                       |

|                      |                                                                                                                                                               |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wiring Method        | Top/bottom cable entry and back cable entry, Bottom cable exit                                                                                                |
| Product Dimensions   | Cable: 227.0 mm × 227.0 mm × 129.0 mm (8.94" × 8.94" × 5.08") (W × H × D)<br>Socket: 227.0 mm × 227.0 mm × 133.5 mm (8.94" × 8.94" × 5.26") (W × H × D)       |
| Packaging Dimensions | Cable: 412.0 mm × 362.0 mm × 313.0 mm (16.22" × 14.25" × 12.32") (W × H × D)<br>Socket: 560.0 mm × 290.0 mm × 260.0 mm (22.05" × 11.42" × 10.24") (W × H × D) |
| Net Weight           | Cable: 22 kW 5.4 ± 0.5 kg<br>Socket: 22 kW 2.8 ± 0.5 kg                                                                                                       |
| Gross Weight         | Cable (One pack): 22 kW 7.5 ± 0.5 kg<br>Socket (One pack of two): 22 kW 7.5 ± 0.5 kg                                                                          |
| Cable Length         | 5 m (16.40 ft) (Including connector)                                                                                                                          |

|                       |                                      |
|-----------------------|--------------------------------------|
| Environment           |                                      |
| Operating Temperature | –30 °C to +50 °C (–22 °F to +122 °F) |
| Storage Temperature   | –40 °C to +70 °C (–40 °F to +158 °F) |
| Operating Altitude    | ≤2,000 m (6561.68 ft)                |
| Protection            | IP55                                 |
| Vandal-proof Rating   | IK10                                 |

|                            |                                                                                        |
|----------------------------|----------------------------------------------------------------------------------------|
| Port                       |                                                                                        |
| Power Input Port           | L1/L2/L3/N/PE                                                                          |
| Power Output Port          | L1/L2/L3/N/PE                                                                          |
| Network Port               | 1 × RJ-45 (100m Ethernet port)                                                         |
| Charging Port              | Type 2 (Socket, IEC 62196 Type2 EU)                                                    |
| Input Wiring Specification | AC Input Cable<br>5 × 6-10 mm2 (9 AWG-7 AWG) 3-Phase<br>RS485 Cable<br>2 × 0.2-1.5 mm2 |
| Others                     | RS485 (CT)                                                                             |

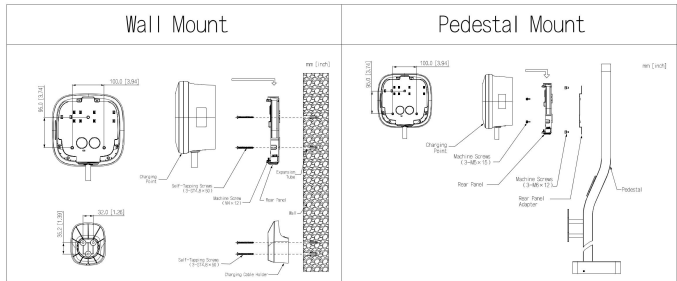
|                      |                                                          |
|----------------------|----------------------------------------------------------|
| Intelligence         |                                                          |
| Load Balancing       | Supports DLB                                             |
| Current Adjustment   | 6-32 A                                                   |
| Reservation          | Yes                                                      |
| Auto-Resume Charging | Yes                                                      |
| PV Green Power       | PV Green Power (Supports three modes : Green、Echo、 Fast) |

|                              |                                                                                                                                                                                                                                                                    |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Certification                |                                                                                                                                                                                                                                                                    |
| Certifications & Regulations | Certifications & Compliances<br>CE/CB (TUV)<br>EN IEC 61851-1, EN IEC 61851-21-2, IEC62955,<br>EN 300328, EISI EN300330, EN301489-1/-17/-3/-52,<br>EN62311, EN50364, ETSI EN 301511,<br>ETSI EN301908-1/-2/-13, 2011/65/EU, 2015/863/EU,<br>EN 18031-1, EN 18031-2 |

Ordering Information

| Type                   | Model                 | Description                       |
|------------------------|-----------------------|-----------------------------------|
| Intelligent EV Charger | DHI-ICS-A220E-H2J-PEN | Overseas DH Intelligent EV Charge |

Installation



Dimensions (mm[inch])

