

### Overview:

EVDS series charging station is an intelligent integrated DC charging station system promoted by SICON to meet market demands. It adopts advanced modular design concept and cutting-edge electronic circuit technology. It consists of controlling unit, power distribution units, and power modules.

- Wide range of AC output voltage, high suitability of utility grid, three phase three wire input without null line in the rectifier unit.
- Has the function of protocol self-recognition, can realize the charging for all type of vehicles.
- LCD touching screen, friendly UI, easy to operate.
- Emergency protection and alarming function, including over voltage, under voltage, over current, over temperature, phase missing, output short-circuit, leakage protection and so on.
- Charging protection function, the charging process will suspend immediately when BMS communication faults, disconnection, over temperature and over voltage occur.
- Emergency stop function, the charging process can be suspended immediately by emergency stop switch.
- with multiple communication interface such as CAN, RS485/RS232, Ethernet, 3G,4G wireless connect to management platform,
- Has insulation monitoring function, automatically turns off the output to ensure safe charging when insulation level is low.
- High efficiency, high reliability, ultralow radiation, fast maintenance, flexible capacity expansion, energy efficiency and environmental protection.

#### Feature:

## Floor Stand DC Charging station:







- power: 30KW-120KW, single, double or quad outlets.
- thin Cabinet, only 450mm, small footprint, easy to put and install.
- One station can charge multiple vehicles, and take turns to charge automatically according to time or changing power.
- High adaptability of temperature range, has isolated heat dissipation air ducts. Power heat dispassion is separated from control circuit to ensure dust-free control circuit.

# Wall-mounted DC charging station:



- The system designed with wall-mounted structure.
- Small size, easy to install.
- Apply to home, or community parking.

## Mobile DC charging station:



- Small size , easy to carry around.
- With castor, move the station close to car and then charge.
- Apply to emergency charging.

Specification:

| opecification             | ••   |                    |               |               |              |              |                                     |
|---------------------------|--|--------------------|---------------|---------------|--------------|--------------|-------------------------------------|
|                           |  | F <b>l</b> oor Typ | oe DC Station |               | Mobile C     | C Station    | Wa <b>ll-</b> mounted<br>DC Station |
|                           | EVDS-500/120                                       | EVDS-500/90        | EVDS-500/60   | EVDS-500/30   | EVDS-500/30M | EVDS-500/15M | EVDS-500/15W                        |
| Model                     | EVDS-700/120                                       | EVDS-700/90        | EVDS-700/60   | EVDS-700/30   | EVDS-700/30M | EVDS-700/15M | EVDS-700/15W                        |
|                           | EVDS-750/120                                       | EVDS-750/90        | EVDS-750/60   | EVDS-750/30   | EVDS-750/30M | EVDS-750/15M | EVDS-750/15W                        |
| System capacity           | 120KW  | 90KW               | 60KW          | 30KW          | 30KW         | 15KW         | 15KW                                |
| Module capacity           | 15KW   |                    |               |               |              |              |                                     |
| Input                     |  |                    |               |               |              |              |                                     |
| Input voltage             | 380Vac   |                    |               |               |              |              |                                     |
| Range of input voltage    | 260V~530V (260V-304VAC, output power derating 50%) |                    |               |               |              |              |                                     |
| Working frequency         | 50/60Hz  |                    |               |               |              |              |                                     |
| Voltage regulation acc    | uracy < 3%   |                    |               |               |              |              |                                     |
| Power factor              | ≥ 0.99   |                    |               |               |              |              |                                     |
| inrush starting current   | ≤110% working max current                          |                    |               |               |              |              |                                     |
| Output                    |  |                    |               |               |              |              |                                     |
| Output voltage            | 200VDC-500VDC / 300VDC-750VDC                      |                    |               |               |              |              |                                     |
| Voltage regulation acc    | uracy ≤ 0.5%                                       |                    |               |               |              |              |                                     |
| Current regulation acc    | uracy Current≥30A , ≤1% ; Current<30A , ≤0.3A      |                    |               |               |              |              |                                     |
| stabilized current prec   | sion ≤ 1%  |                    |               |               |              |              |                                     |
| stabilized voltage precis | sion ≤ 0.5%  |                    |               |               |              |              |                                     |
| Peak-to-Peak noise        | <br>≤ 0.5%(0MHz ~ 20MHz)                           |                    |               |               |              |              |                                     |
| voltage of DC output      | S 0.3%(UNINZ ~ ZUNINZ)                             |                    |               |               |              |              |                                     |
| Soft start time           | 3~8s   |                    |               |               |              |              |                                     |
| Overall efficiency        | ≥ 95%  |                    |               |               |              |              |                                     |
| BMS auxiliary power       | supply 12V/10A                                     |                    |               |               |              |              |                                     |
| communication mod         | e Ethernet、CAN/RS485、3G/4G                         |                    |               |               |              |              |                                     |
| Charging mode             | Auto or Manual                                     |                    |               |               |              |              |                                     |
| Protection degree         | IP55 ( outdoor )                                   |                    |               |               |              |              |                                     |
| Acoustic noise            | ≤ 50dB   |                    |               |               |              |              |                                     |
| Operating temperatu       | re -20°C ~60°C                                     |                    |               |               |              |              |                                     |
| Operating humidity        | ≤ 95% non-condensing                               |                    |               |               |              |              |                                     |
| A <b>l</b> titude range   | 2000 meter; derating above 2000 meter.             |                    |               |               |              |              |                                     |
| Dimension (W*D*H)         | 960,   | *450*1950          | 600*450*18    | 50 450*450*17 | 50 440*435   | *940 85      |                                     |