Since 2020

# CHHABI EVSE

a product catalog

# About us

We at Chhabi EVSE envision a world which is not dependent on fossil fuels only. We strongly believe and support that it is time to move away from fossil fuels and move towards cleaner energy sources. The vision is about sustainable living using clean energy for the generations to come. Electric Vehicles are one way of living sustainably by reducing the dependency on fossil fuels for mobility application and the charging infrastructure will be the back-bone of this sector.

Chhabi EVSE which is part of the Chhabi group brings in 60years of charging experience. Chhabi has been a household name for DC Power solutions in the power and energy sector of this country. With the advent of electric vehicles, Chhabi ventured into manufacturing of EV chargers for home & public charging requirements as per the core purpose of providing innovative solutions for better tomorrow. Chhabi EVSE is a dedicated vertical for developing & delivering EV charger products and services. With home-grown technology and the ability to customize, Chhabi EVSE provides the industry scalable EV charging solutions.

# Products

## 01 Fast Chargers (DC)

- 30 KW
- 60 KW
- 120 KW
- 180 KW
- 240 KW

### Key Offerings

- Available in Single gun/ Dual gun options
- Available in CCS-2/ CHAdeMO/ GB/T connector options
- Degree of freedom customizable to IP-55
- Optional support for capacity expansion

## 02 Slow Chargers (AC)

- 7.4 KW
- 22 KW

### Key Offerings

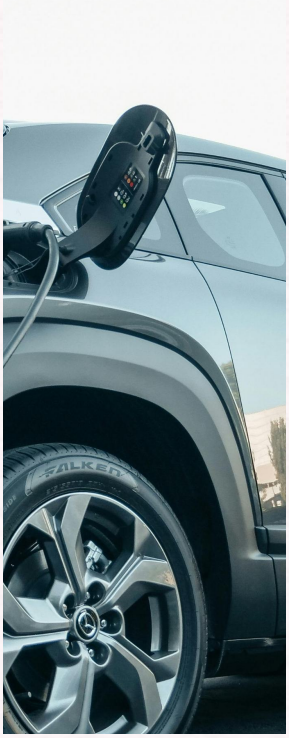
- Available in Single gun/ Dual gun options
- Available in Type -1 & Type -2 Connector options
- Branding and look can be customized on request
- Residential and commercial options available

# Fast Charger (DC)

DC Chargers are chargers which supply DC (Direct current) to the electric vehicle. The AC -DC conversion happens in the onboard charger supplied and it bypasses the onboard converter. Thus depending on the capacity of onboard converter/charger & the demand of the EV, the DC current is provided and therefore at low state of charge (SOC) higher currents can be given. In this mode, EVs can get charged in less than an hour and therefore, DC Charging is known as fast charging.

## Applications

- Public Charging: DC Charging being the fast-charging option is the most used charging mode on public charging stations. These stations which are located on highways, hotels and malls where EV owners spend limited amount of time and have the need for quick charging.
- Public Transportation: Public transportation like buses and last mile transport need quick charging option as these vehicles must be on the road supporting the public for reaching their desired destinations
- Fleets Charging: Fleets have diDerent charging requirements at diDerent times however during the day when the vehicles get discharged due to their desired running and have to return back quickly, this option is the most feasible mode of charging.



# Key features

- Integrable with CSMS for remote operations
- Customized option available to suit special requirements
- Branding and look can be personalized
- Designed to create perfect balance between component assembly & heat management
- Compliant to charge ISO type & DIN Type vehicles

# Key technical specification

- Modular in nature and can be provided in increments of 20KW/30KW
- Display options of 7”& 10” inch with LED glow bar provided
- Charging capability of CCS-2/ GB/T or Chademo
- Ingress protection of IP54 and scalable to IP55
- OCPP 1.6J protocol enabled through WIFI/sim, RFID or ethernet connectivity

# 30 kw

Technical specification

| | |
|---|---|
| Input voltage | 415VAC, 3-phase/L1, L2, L3, N, PE |
| Input voltage range | 260VAC – 530VAC ( |
| Input frequency range | 45Hz – 55Hz |
| Power factor | >0.99 |
| Total Harmonic Distortion | <5% |
| DC power rating | 30kw |
| Output voltage | 200-1000V DC |
| Dc output current | Up to 100A |
| Efficiency | Up to or greater than 95% full load |
| Connectivity | OCPP V1.6J through WIFI/ Ethernet/4G Sim or RFID |
| Display | 7" or 10" LCD Touch Screen |
| Support language | English |
| Emergency Switch | Available (Mushroom red switch) |
| User authentication | RFID/App/OTP/QR (as per requirement) |
| Safety parameter | Over current, Under voltage, Over voltage, Residual current, Surge protection, short circuit, Over temperature, Ground fault, Insulation fault, Emergency stop |
| Operating temperature | -20°c to 75°c (de rating from 55°c) |
| Storage temperature | -20°c to 80°c |
| Humidity | 5% to 95% non-condensing |
| Altitude | Up to 2000 mtr. |
| Ingress protection | IP54 |
| Cooling | Forced air cooling |
| Weight | 230kg |
| Dimension (H*W*D) | 700*700*700 mm – Wall mounted |
| Charging cable length | >4.5 meter (standard) |
| Charging operation | Cyclic mode |

# 60 kw

## Technical specification

| | |
|---|---|
| Input voltage | 415VAC, 3-phase/L1, L2, L3, N, PE |
| Input voltage range | 260VAC – 530VAC |
| Input frequency range | 45Hz – 55Hz |
| Power factor | >0.99 |
| Total Harmonic Distortion | <5% |
| DC power rating | 60kW |
| Output voltage | 200-1000V DC |
| Dc output current | Up to 150A |
| Efficiency | Up to or greater than 95% full load |
| Connectivity | OCPP V1.6J through WIFI/ Ethernet/4G Sim or RFID |
| Display | 7" or 10" LCD Touch Screen |
| Support language | English |
| Emergency Switch | Available (Mushroom red switch) |
| User authentication | RFID/App/OTP/QR (as per requirement) |
| Safety parameter | Over current, Under voltage, Over voltage, Residual current, Surge protection, short circuit, Over temperature, Ground fault, Insulation fault, Emergency stop |
| Operating temperature | -20°c to 75°c (de rating from 55°c) |
| Storage temperature | -20°c to 80°c |
| Humidity | 5% to 95% non-condensing |
| Altitude | Up to 2000 mtr. |
| Ingress protection | IP54 |
| Cooling | Forced air cooling |
| Weight | 310kg |
| Dimension (H*W*D) | 1800*800*600 mm |
| Charging cable length | >4.5 meter (standard) |
| Charging operation | Cyclic mode |
| Charging mode | Mode for DC charging |

# 120 kw

| | |
|---|---|
| Input voltage | 415VAC, 3-phase/L1, L2, L3, N, PE |
| Input voltage range | 260VAC – 530VAC |
| Input frequency range | 45Hz – 55Hz |
| Power factor | >0.99 |
| Total Harmonic Distortion | <5% |
| DC power rating | 120kW |
| Output voltage | 200-1000V DC |
| Dc output current | Up to 200A |
| Efficiency | Up to or greater than 95% full load |
| Connectivity | OCPP V1.6J through WIFI/ Ethernet/4G Sim or RFID |
| Display | 7" or 10" LCD Touch Screen |
| Support language | English |
| Emergency Switch | Available (Mushroom red switch) |
| User authentication | RFID/App/OTP/QR (as per requirement) |
| Safety parameter | Over current, Under voltage, Over voltage, Residual current, Surge protection, short circuit, Over temperature, Ground fault, Insulation fault, Emergency stop |
| Operating temperature | -20°c to 75°c (de rating from 55°c) |
| Storage temperature | -20°c to 80°c |
| Humidity | 5% to 95% non-condensing |
| Altitude | Up to 2000 mtr. |
| Ingress protection | IP54 |
| Cooling | Forced air cooling |
| Weight | 340kg |
| Dimension (H*W*D) | 1800*800*700 mm |
| Charging cable length | >4.5 meter (standard) |
| Charging operation | Cyclic mode |
| Charging mode | Mode for DC charging |

Technical specification

# 180 kw

Technical specification

| | |
|---|---|
| Input voltage | 415VAC, 3-phase/L1, L2, L3, N, PE |
| Input voltage range | 260VAC – 530VAC |
| Input frequency range | 45Hz – 55Hz |
| Power factor | >0.99 |
| Total Harmonic Distortion | <5% |
| DC power rating | 180kW |
| Output voltage | 200-1000V DC |
| Dc output current | Up to 250A |
| Efficiency | Up to or greater than 95% full load |
| Connectivity | OCPP V1.6J through WIFI/ Ethernet/4G Sim or RFID |
| Display | 7" or 10" LCD Touch Screen |
| Support language | English |
| Emergency Switch | Available (Mushroom red switch) |
| User authentication | RFID/App/OTP/QR (as per requirement) |
| Safety parameter | Over current, Under voltage, Over voltage, Residual current, Surge protection, short circuit, Over temperature, Ground fault, Insulation fault, Emergency stop |
| Operating temperature | -20°c to 75°c (de rating from 55°c) |
| Storage temperature | -20°c to 80°c |
| Humidity | 5% to 95% non-condensing |
| Altitude | Up to 2000 mtr. |
| Ingress protection | IP54 |
| Cooling | Forced air cooling |
| Weight | 380kg |
| Dimension (H*W*D) | 1800*800*700 mm |
| Charging cable length | >4.5 meter (standard) |
| Charging operation | Cyclic mode |
| Charging mode | Mode for DC charging |

# 240 kw

| | |
|---|---|
| Input voltage | 415VAC, 3-phase/L1, L2, L3, N, PE |
| Input voltage range | 260VAC – 530VAC |
| Input frequency range | 45Hz – 55Hz |
| Power factor | >0.99 |
| Total Harmonic Distortion | <5% |
| DC power rating | 240kW |
| Output voltage | 200-1000V DC |
| Dc output current | Up to 250A |
| Efficiency | Up to or greater than 95% full load |
| Connectivity | OCPP V1.6J through WIFI/ Ethernet/4G Sim or RFID |
| Display | 7" or 10" LCD Touch Screen |
| Support language | English |
| Emergency Switch | Available (Mushroom red switch) |
| User authentication | RFID/App/OTP/QR (as per requirement) |
| Safety parameter | Over current, Under voltage, Over voltage, Residual current, Surge protection, short circuit, Over temperature, Ground fault, Insulation fault, Emergency stop |
| Operating temperature | -20°c to 75°c (de rating from 55°c) |
| Storage temperature | -20°c to 80°c |
| Humidity | 5% to 95% non-condensing |
| Altitude | Up to 2000 mtr. |
| Ingress protection | IP54 |
| Cooling | Forced air cooling |
| Weight | 400kg |
| Dimension (H*W*D) | 1800*800*800 mm |
| Charging cable length | >4.5 meter (standard) |
| Charging operation | Cyclic mode |
| Charging mode | Mode for DC charging |

Technical specification

# Great, isn’t it?

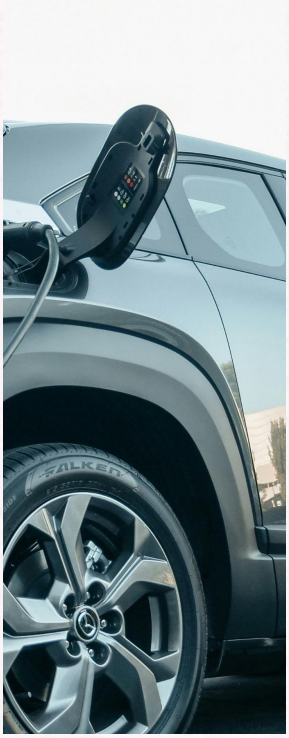
# Slow Charger (AC)

AC Chargers are chargers which supply AC (Alternating current) to the electric vehicle. The AC power is generally known as grid/ utility power and the AC chargers rely on the on-board AC-DC converter to charge the batteries.

The on-board converters have limits for size & cost and hence these converters are constant low power converters and therefore AC Charging is known slow charging.

## Applications

- Home Charging: Perfect solution for home charging as this option can be chosen when the EV owners are at home and vehicles thus can be charged overnight where the load constraints at individual homes allow this option to be very feasible.
- Commercial Charging: Vehicles parked in the commercial spaces can choose the slow charging option as these vehicles are generally parked during the day when the EV owners are at work.
- Fleets Charging: Fleets have diDerent charging requirements at diDerent times however when the vehicles are not operational for a considerable amount then this charging option can be taken for charging the vehicles.



# Key features

- Interactive display for all charging related information
- Easy to install and operate
- Ground mounted and wall mounting option available
- Load balancing feature for multiple chargers
- Personal charging and commercial charging option available

# Key technical specification

- Ingress protection of IP67
- Communication through WIFI/sim, RFID or ethernet available
- Type-2 connector provided
- Protections & safety enabled
- OCPP 1.6J protocol enabled

# 7.4 kw

| | |
|---|---|
| Rated Maximum Power | 7.4kW 230v, 1-phase 3wire (L+N+PE) |
| Rated Maximum current | 32A |
| MCB Recommended | 40A, 2 pole |
| Input cable conductor recomd. size | 6 sq mm 3 core cable |
| Input voltage | 230 VAC 50Hz 1 phase (L+N+PE) |
| Input current | 32A (Max) |
| Output Voltage | 230 VAC ±10%, 1-phase |
| Output current | 32A (Max) |
| Standby power | 3W |
| Charging mode | RFID or CSMS enabled through OCPP |
| Display | In multiple options and default display as 4”3 |
| Communication Interface | Ethernet/SIM/ WIFI |
| OCPP 1.6J Compliance | Yes |
| Rated Maximum current | Over current, Over voltage, Under voltage, Over temperature, Leakage, Lightning, Unconnected PE ground |
| Installation method | Wall mounted, Stand mounted |
| Charging connector | Type 2 |
| Charging cable | 5m (standard configuration) |
| Size (H*W*D) | 400*300*210mm |
| Net weight | Approx 10kg |
| Protection level | IP55/IP67 |
| Altitude | ≤2000m |
| Relative humidity | 5%~95% |
| Operating temperature | -10~55℃ |
| Storage temperature | -40~75℃ |
| Operating life | ≥10000hrs |

Technical specification

# 22 kw

| | |
|---|---|
| Rated Maximum Power | 22kW 400v, 3-phase 3/4wire (L+N+PE) |
| Rated Maximum current | 32A |
| MCB Recommended | 40A, 2 pole |
| Input cable conductor recomd. size | 6 sq mm 3 core cable |
| Input voltage | 400 VAC 50Hz 3 phase (L+N+PE) |
| Input current | 32A (Max) |
| Output Voltage | 400 VAC ±10%, 3-phase |
| Output current | 32A (Max) |
| Standby power | 3W |
| Charging mode | RFID or CSMS enabled through OCPP |
| Display | In multiple options and default display as 4”3 |
| Communication Interface | Ethernet/SIM/ WIFI |
| OCPP 1.6J Compliance | Yes |
| Rated Maximum current | Over current, Over voltage, Under voltage, Over temperature, Leakage, Lightning, Unconnected PE ground |
| Installation method | Wall mounted, Stand mounted |
| Charging connector | Type 2 |
| Charging cable | 5m (standard configuration) |
| Size (H*W*D) | 650*400*450mm |
| Net weight | Approx 25kg |
| Protection level | IP55/IP67 |
| Altitude | ≤2000m |
| Relative humidity | 5%~95% |
| Operating temperature | -10~55℃ |
| Storage temperature | -40~75℃ |
| Operating life | ≥10000hrs |

Technical specification