# TECHNICAL DATASHEET

## NEENJAS ELECTRIC PVT LTD

EV Charger | 58.4V | 50A | Multi Stage Charging

**Model:** NEV-3300WP-LX-48

AIS-156 COMPLIANT

POWER FACTOR CORRECTION

## DESCRIPTION

| MODEL NUMBER | BATTERY | VOLTAGE RANGE | CURRENT RANGE | MAX POWER | AMBIENT |
|---|---|---|---|---|---|
| NEV-3300WP-LX-48 | 51.2V<br>LFP | 58.4V | Pre-Charge Mode: 20% of max current<br>CC Mode: 50A<br>(As per AIS-156 ammendment-3) | 3300W | At Ta: 25°C<br>At Tc: 55 °C |



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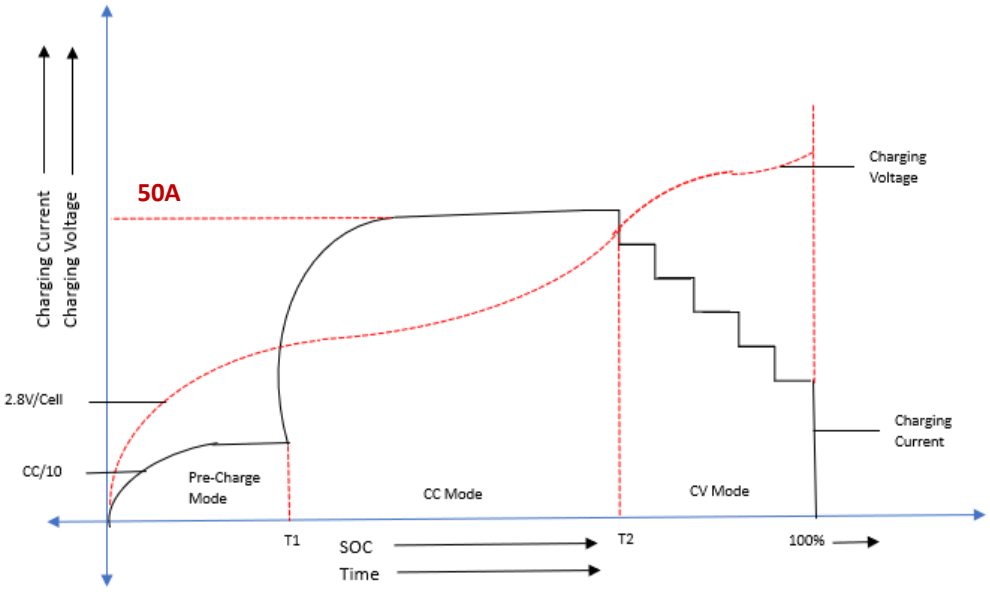
# KEY FEATURES:

1. Multi Stage Charging (Pre charge, CC, CV & Custom Charging Profile).
2. Wide Input Range. (90V – 265V)
3. OCP, SCP, OVP, OTP, Reverse Battery Protection, Surge 4KV and EMI.
4. UDS CAN Bootloader.
5. CC-PP compatibility for AC Charging Stations.
6. Available for both On-board and Off-Board Applications.

## CHARGING PROFILE




## MODEL ENCODING

**NEV -3300WP-LX-48**

- Nominal Voltage
- Type of Battery (X - LFP/NMC)
- IP (WP= WP, NWP = Forced cooling)
- Max Wattage



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# GENERAL SPECIFICATIONS

| SECTION | PRODUCT CODE | NEV-3300WP-LX-48 |
|---|---|---|
| **OUTPUT** | Battery Type | LFP |
| | DC Voltage | 51.2V |
| | Output Current | 50A |
| | Max Cut-off Voltage | 58.4V |
| | Maximum Rated Power | 3300W |
| | Current Precision | ±3% |
| | Voltage Precision | ±0.5V |
| | Power Consumption(105ah) | 5200W (Approx) |
| | Modes | Pre-Charge-CC-CV/custom profile |
| | Connectors | Can be customised as per requirement |
| | Input AC Voltage | 90-265VAC<br>Under Voltage cut off @85V +/- 5V AC<br>Power Derating: if input current >16A<br>Over Voltage cut off @270V +/- 5V AC |
| **INPUT** | Power Factor | **>0.98** (@230VAC@Full Load) |
| | Input Current at 230VAC | 16A |
| | Input Frequency | 47-53 Hz |
| | Efficiency at 230VAC Full Load | **> 91%** |
| | Surge L/N, L/E | 4kV |
| | Connection | Input Connector: Amphenol (HVSL633063) |
| | Hardware Version | V1 |
| **Protocol Info** | Software Version | V1 |
| | Protocol | Can be customised as per requirement |
| | Output Over Current | Yes |
| **PRTOTECTIONS** | Output Short Circuit | Yes |
| | Output Over Voltage | Yes |
| | Reverse Polarity | Built-in |
| | Input Over Voltage (up to 440VAC) | Yes (built in) |
| | Withstand Voltage | I/P-O/P: 2.5kV |
| **SAFETY & EMC** | Isolation Resistance | Input-Output, Input-GND, Output-GND: >10MΩ, 500VDC at 25°C |
| | EMC Immunity | CE CISPR25 Class 3 |
| | Casing Dimensions(mm) | 213mm*205.4mm*97.5mm |
| **OTHERS** | Weight (Kgs) | 5.5 KG |
| | IP Rating | IP67 |

**NOTE:** Unless otherwise stated, the data are based on 25°C ambient temperature, 230VAC input voltage and full load. Specification is subject to change without notice



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# IN HOUSE SURGE TEST ANALYSIS

| Voltage | Polarity | Status |
|---|---|---|
| 2KV | Line – Neutral | PASS |
| 2KV | Line – Earth | PASS |
| 4KV | Line – Neutral | PASS |
| 4KV | Line – Earth | PASS |

## IS-9000 TESTING

| SUMMARY OF TEST | |
|---|---|
| **Clause No.** | **Test(s) performed (name of test)** |
| 1 | Free Fall (IEC 60068-2-31: 2008) |
| 2 | Vibration Test (IEC 60068-2-6:2007) |
| 3 | Impact Test (IEC 60068-2-75: 2014) |
| 4 | Dry Heat Test (IEC 60068-2-2: 2007) |
| 5 | Cold Test (IEC 60068-2-1: 2007) |
| 6 | Temperature & Humidity Test (IEC 60068-2-78: 2012) |



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## SINGLE LED INDICATIONS

| Stages | LED |
|---|---|
| **Stand By** | **White Constant** |
| **Charging** | **Green Blinking** |
| **Charge Complete/ Full charge** | **Green Constant** |
| **Battery Error** | **Red constant** |
| **Sleep Mode (Restart Charger)** | **No LED** |

**Battery error:** Battery not connected to charger or protection errors i.e., error from battery side**.**

## PROTECTION RESPONSE

| SECTION | PARAMETER |
|---|---|
| OVER CURRENT PROTECTION | Output is limited to 110% of rated output current. |
| SHORT CIRCUIT PROTECTION | When output is being shorted, The charger will stop charging and will automatically recover when short is removed. |
| OVER TEMPERATURE PROTECTION | When the internal temperature exceeds the defined limits, the charger does over temperature detection and the output charging current shall be limited. Once the temperature comes down charger will recovery to normal mode. |
| REVERSE BATTERY PROTECTION | If Battery connections are wrong, the charger will not give output. |
| INPUT OVER/UNDER VOLTAGE PROTECTION | When the input voltage exceeds the defined limits, the charger will not give output, once the voltage is normal the charger goes to normal mode. |



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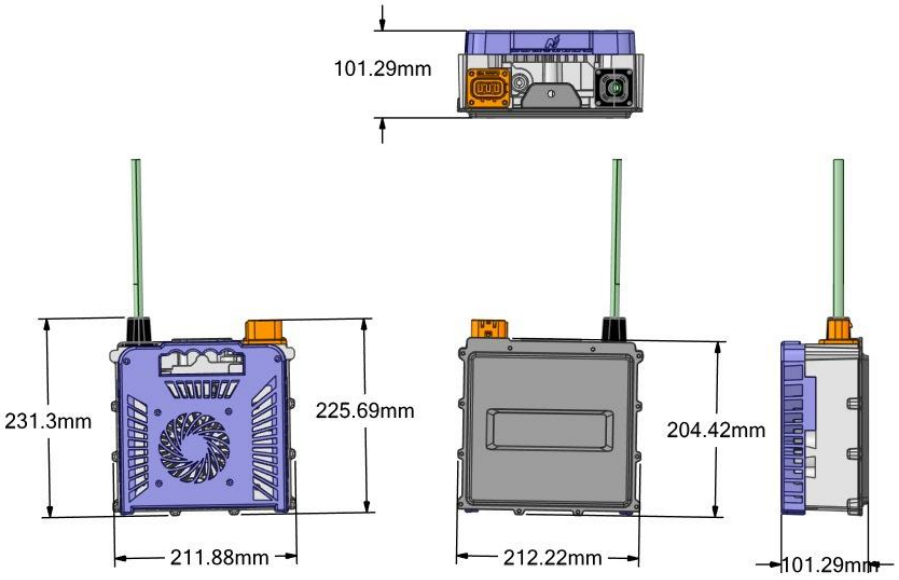
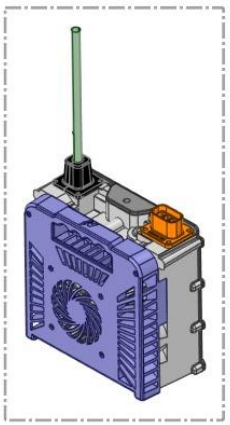
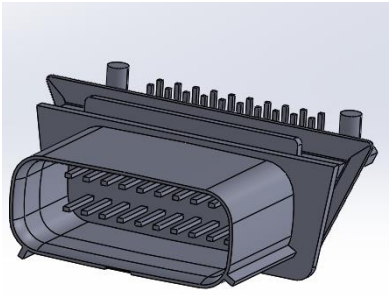
## Mechanical & CAD Drawing







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