

**PRODUCT ADVANTAGES:**

- Innovative Architecture
- Energy Saving
- Wide Industry Usage
- Technically Complied
- Approved Circuit Design
- Cost Effective With Long Term Service
- 350+ Battery Charger Installed in Pakistan



NTDC Design Approved

# GRID STATION BATTERY CHARGER

220VDC 120Amp

**PRODUCT FEATURES:**

- Load protection and safety at high input voltage levels
- Increased battery life with low DC ripple values.
- Low battery and rectifier failure alarms.
- Adjustable boost and float charging.
- Automatic alarm contacts.
- Front panel equipped with all necessary voltage and current indicators.
- High temperature protection through self-cooling.
- Automatic voltage adjustment, controlled current capability and short circuit protection

Your's Complete Power  
Solution Provider





## 220V DC, 120 Amp Battery Charger Data Sheet

### Section 1 – Product Identification

Model	<b>22120CP3-R0</b>
Specifications	Confirms to NTDC specification of station Battery charger suitable for 220VDC @ 2 V cell batteries

### Section 2 – Electrical Characteristics

Topology	Three –phase full controller full wave AC rectifier with isolation transformer
Nominal Rating	220V DC, 120Amp
Related Voltage	415VAC $\pm$ 10%
Related Frequency	50Hz $\pm$ 5%
Isolation Voltage	2K VAC input chassis and output chassis for 1 minute.
Insulation Resistance	>20 M $\Omega$
Transformer	Galvanically Isolated Taps, 380,400,415,430 VAC
Float Output Voltage	220V – 264V
Boost Output Voltage	242V – 286V
Output Ripple	Less than 3% RMS
Full Load Efficiency	>81% Operating

### Section 3 – Safety and Security Characteristics

Protection Level	IP 23 (Standard) : IP 54 (Optional)
Filtering	L-C Filter
Cooling System	Natural cooled
Temperature	0 to +50 °C
Relative Humidity	0% to 95% Non Conductive

### Section 4 – Physical Characteristics

Enclosure Material	Mild Steel , Zinc Phosphate Coated; 120 $\mu$ m Electrostatic paints; 2.0mm thickness
Front Panel	During normal Operation of battery charger, no need to open the door. All the essential parameters are available at front panel
Indications	Main AC, Float, Boost
Measurements	AC Main Voltmeter, DC Charger/Battery Voltmeter, DC Charger Ammeter, Dc Load Ammeter.
Panel Lights	20 Watt Lamp , 220VAC operated through Door Switch
Panel Sockets	3-Pin female socket for general use up to 240V, 05 Amp
Cable Entry	Front bottom
Switches	Main ON/OFF , Voltage Selector switch for charger/battery load, Mode selector switch for Float , Boost, Auto, Manual
Remote Indicators	Charger Failure, DC Over battery Voltage, DC Under Voltage, Capacitor Fuse failure, Load Over Voltage, Phase abnormal

### Section 5 – Dimensions

Height	2200mm
Width	1000mm
Depth	800mm
Weight	1000Kg (approx.)

**Note:** Charger Specifications and design are subject to change without any prior notice.