The PLN-24CH12 Battery charger, 24V makes sure that the system batteries are always charged in public address and emergency sound systems. Rack-mountable, the unit charges lead-acid batteries and simultaneously provides 24 V for system components. The battery charger is fully compliant and certified to EN 54-4. The battery charger is a microprocessor controlled device of premium quality.

**Functions**

**Performance**
The maximum charger current is 12 A for charging the battery. The maximum battery capacity, according to EN 54-4, is 225 Ah. The minimum size is 86 Ah. The maximum output of the back-up power system is 150 A.
The charger has an input voltage range of 195 V to 264 V, and a power factor corrector. The charger features:
- Automatic shutoff when the battery voltage is too low to prevent battery damage
- Over-voltage protection
- Protection against wrong battery polarity
- Short-circuit protection.
The outputs are protected by fuses. The power supply takes a resistance measurement of the battery, including connections, every four hours.
The charger comes with a temperature sensor to adapt the charging voltages to the actual battery temperature for best performance.
The charger has additional 24 V auxiliary outputs, to supply power to equipment that needs 24 V as primary power. The current capacity of these outputs is 5 A per output.

The charger has relay outputs to signal a mains fault, battery fault and charger output voltage fault.

**Controls and indicators**
- Mains status LED
- Battery status LED
- Output voltage fault LED

**Interconnections**
- 6 main outputs for the system, each with its own fuse
- 3 auxiliary outputs for peripherals, system components that always use 24 V with a lower current need
- Fault relays
- Battery connection
Communications Systems - PLN-24CH12 Battery charger, 24V

### Regulatory information

**Emergency standard certifications**

Europe EN 54-4

**Regulatory areas**

Safety EN 62368-1 EN 62479

Immunity EN 50130-4

Emissions EN 61000-6-1 EN 61000-6-2 EN 61000-6-3

Environment EN 50581

**Conformity**

Europe CE/CPR, UKCA

Australia RCM

Russian federation EAC

**Region** | **Regulatory compliance/quality marks**
---|---
Europe | CPR PLN-24CH12
| DOP EN 54-4 PLN-24CH12
| UKCA DECL UK PLN-24CH12
Europe | DOP EN54-16 PlenaVAS Issue 1
| CPR EN54-16 PlenaVAS Issue 1
| CPR 1438-CPR-0210_10.06.2022
| DOP EN54-16 PlenaVAS Issue 2
| CE PLN-24CH12

### Installation/configuration notes

- 6 main outputs, 40 A (32 A GG fuse) per output.
- 3 auxiliary outputs, 5 A (5 AT fuse) per output.
- The maximum total back-up current is 150 A (9 outputs).
- The maximum charger output current to the battery and outputs combined is 12 A.

### Parts included

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PLN-24CH12 Battery charger, 24V</td>
</tr>
<tr>
<td>1</td>
<td>Mains cable</td>
</tr>
</tbody>
</table>

### Technical specifications

#### Electrical

**Mains power supply**

- Input voltage (VAC) 195 VAC – 264 VAC
- Power frequency 50 Hz; 60 Hz
- Input current (A) 2 A
- Power consumption (W) 380 W maximum
- Operating voltage (VDC) 21.60 VDC – 28.50 VDC

**Main outputs (6x)**

- Output voltage 24 VDC (battery voltage)
- Output current 40 A

**Auxiliary outputs (3x)**

- Output voltage 24 VDC (battery voltage)
- Output current 5 A

**Fault outputs (3x)**

- Rating 24 VDC/1 A, 120 VAC/500 mA voltage free
- Contacts Normally energized (failsafe)

#### Mechanical

- Dimensions (H x W x D) (mm) 88 mm x 483 mm x 340 mm
- Dimensions (H x W x D) (in) 3.46 in x 19 in x 13.4 in
- Rack unit (U) 2 U, 19"
- Input connections (to battery) Screw terminal
- Output connections (to system) 10x pluggable screw connectors
- Weight (kg) 6 kg
- Weight (lb) 13.20 lb
- Color in RAL faceplate RAL 7021 Black gray
Environmental

<table>
<thead>
<tr>
<th>Environmental Details</th>
<th>Temperature Range (°C)</th>
<th>Temperature Range (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature</td>
<td>-5 °C – 45 °C</td>
<td>23 °F – 113 °F</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-25 °C – 85 °C</td>
<td>-13 °F – 185 °F</td>
</tr>
<tr>
<td>Operating relative humidity, non-condensing</td>
<td>0% – 95%</td>
<td></td>
</tr>
</tbody>
</table>

Ordering information

**PLN-24CH12 Battery charger, 24V**
Battery charger for charging 24 V lead-acid batteries and simultaneously providing 24 VDC, fully protected and supervised, rack unit 2 RU.
Order number **PLN-24CH12 | F.01U.214.760**

**Services**

**EWE-24VBCH-IW 12 mths wrty ext. 24V Battery Charger**
12 months warranty extension
Order number **EWE-24VBCH-IW | F.01U.360.700**