

PLN-24CH12 Battery charger, 24V

PLENA voice alarm



- ▶ 12 A battery charger
- ▶ 6x 40 A, 3x 5 A outputs
- ▶ 150 A back-up current
- ▶ Fully supervised, EN 54-4 certified
- ▶ Under-voltage and over-voltage protection

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

Regulatory information

Emergency standard certifications

Europe	EN 54-4
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Regulatory areas

Safety	EN 62368-1 EN 62479
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Immunity	EN 50130-4
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Emissions	EN 61000-6-1 EN 61000-6-2 EN 61000-6-3
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Environment	EN 50581
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Conformity

Europe	CE/CPR, UKCA
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Australia	RCM
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Russian federation	EAC
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Region	Regulatory compliance/quality marks	
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Europe	CPR	PLN-24CH12
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DOP	EN 54-4 PLN-24CH12
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Great Britain	UKCA	DECL UK PLN-24CH12
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Europe	DOP	EN54-16 PlenaVAS Issue 1
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CPR	EN54-16 PlenaVAS Issue 1
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CPR	1438-CPR-0210_10.06.2022
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DOP	EN54-16 PlenaVAS Issue 2
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CE	PLN-24CH12
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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

Quantity	Component
1	PLN-24CH12 Battery charger, 24V
1	Mains cable

Quantity	Component
1	Installation and User Instructions
1	Temperature sensor with cable

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

Operating temperature (°C)	-5 °C – 45 °C
Operating temperature (°F)	23 °F – 113 °F
Storage temperature (°C)	-25 °C – 85 °C
Storage temperature (°F)	-13 °F – 185 °F
Operating relative humidity, non-condensing (%)	0% – 95%

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**

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