
24 V power supply USV-NT 24 / 5 S

Battery buffered 24 V
power supply
for security systems



This battery supported UPS power supply has many applications. This device has been developed for the security field such as access controls, gate closing systems, fire, smoke and intrusion alarm systems.

The device designed according to the VDE 0833 and VdS 2227 guidelines is distinguished by compact dimensions and user-friendly detail solutions. With an input voltage of 88 - 264 V, the primary pulsed power supply provides an output voltage of 27.6 V at 6.5 amperes. The operating principle is parallel operational readiness with CC/CV constant regulation.

A controller tests the battery and power supply approx. every 2 minutes in accordance with the applicable VDE and VdS regulations. A positive side effect of this cyclic battery load is that undesired sulphation of the battery is largely prevented.

The full discharge protection (activation at 20 V battery voltage) prevents discharge of the battery below the full discharge protection limit. Operating, mains and battery faults are indicated via LEDs on the front side and/or using voltage-free signal contacts.

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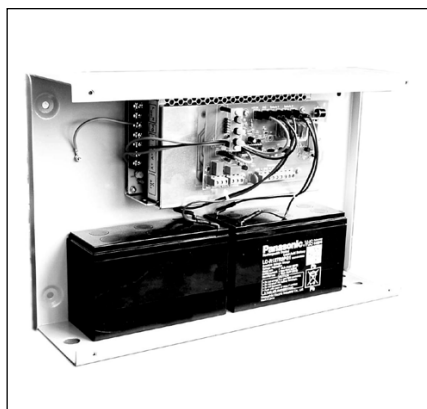
Technical data

Mains voltage	88 V - 132 V, 176 - 264 V AC, switchable
Output voltage	27.6 V DC
Full discharge protection	at $U_a < 20$ V
Power consumption	max. 200 W
Maximum output current	6.5 A
Voltage-free fault contact for battery fault / mains fault	contact rating max. 30 V DC / 1 A
Battery	2 x 12 V up to 10 AH
Battery fuse	5 A
Battery reverse polarity protection	yes
Ambient operating temperature	0 °C ... + 40 °C
Relative humidity	< 93 % (no condensation)
Protection classification (EN 60529 / IEC 529)	IP 43
Device displays	Betrieb (Operation) Netzstörung (Mains fault) Akkustörung (Battery fault)
Protection functions	overvoltage protection battery full discharge protection dynamic battery monitoring mains power monitoring
Compliance with standards	VDE 0833 EN 60950 EN 55022 B EN 61000-4-2,3,4,5,6,8,11 EN 61000-3-2.3
Casing	metal case, light grey powdered
Dimensions / Weight	400 x 255 x 110 mm, approx. 6.0 kg

Special version

Special versions for batteries up to 28 AH are possible, please ask for further information.
Dimensions are then: 470 x 320 x 135 mm, weight approx. 7 kg

Interior view



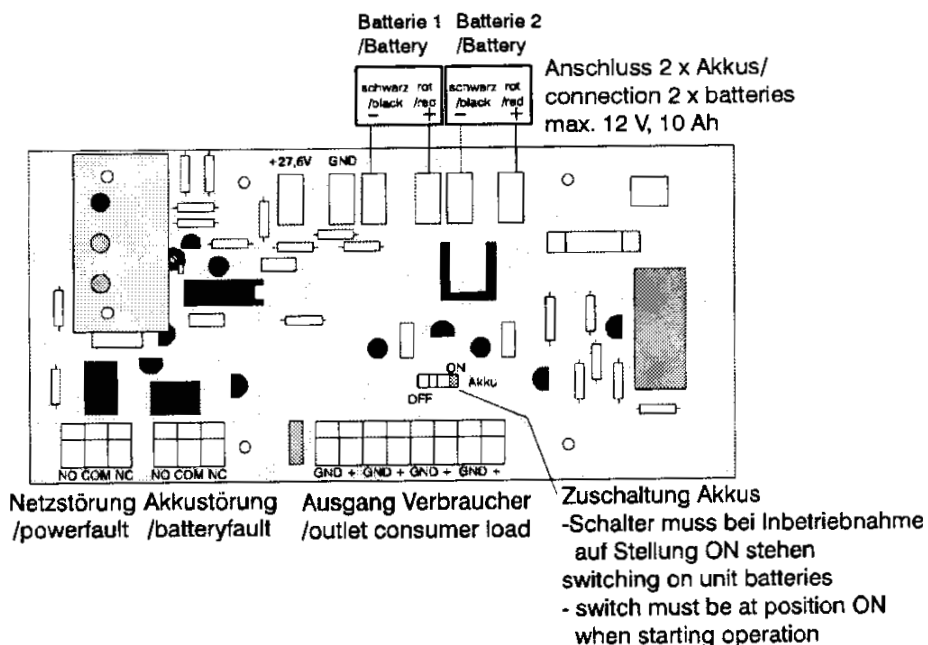
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Connection and commissioning

1. Undo the 4 screws of the case lid on the front side.
2. Place both batteries (not supplied) in the place provided in the case.
3. Install the required number of cable glands in the case. Cable passages not needed are closed with screw-in blank caps.
4. Insert the power cable in the case and connect to the N, L1, PE terminals of the main board **while the power is disconnected**. Secure the power cable (PG connector).
5. Insert necessary supply lines for the consumers in the case and, **while the power is disconnected**, connect the cables to the terminals GND and + Out, and if available the signal line to the fault contacts (NO - C - NC), of the main board (see connection diagram). Secure the supply lines (PG connectors).
6. Connect the pre-installed battery cable as follows (see connection diagram)

black cable	Minus pole	1st battery
red cable	Plus pole	1st battery
black cable	Minus pole	2nd battery
red cable	Plus pole	2nd battery
7. Switch on 230 V mains supply.
8. If the connection is correct, the green „Operation“ LED lights

For storage / transport or shutdown
please remove the battery fuse, otherwise the battery will be discharged.



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