



Expert Power Backup 8810-3
Online UPS for reliable power management

Key Benefits



1. Zero Transfer Time

Power switching of Online UPS from the main supply to battery is instantaneous (0 ms).

Why it matters: This ensures continuous power without interruption, making it ideal for critical equipment like servers, data centers, and medical devices.



2. Pure Sine Wave Output

Provides clean and consistent power regardless of fluctuations or noise in the main supply.

Why it matters: Protects sensitive electronic equipment from damage or malfunction due to power surges, sags, or harmonic distortion.



3. Voltage and Frequency Regulation

Online UPS constantly regulates both voltage and frequency, even when the main power is present.

Why it matters: Offers superior power quality, essential for environments where precision and stability are critical.



4. Enhanced Protection and Reliability

Acts as a barrier between utility power and equipment, filtering out spikes, surges, and brownouts.

Why it matters: Ensures longer lifespan of connected devices and reduces downtime, especially in mission-critical applications.

Features at a glance

- True double conversion technology
- For maximum efficiency: Output power factor of 1.0
- Precise output voltage: Output voltage regulation < 1 %
- Improved peak-to-rms ratio: High crest factor 3:1
- Improved load management: Programmable power outlets
- Integrated emergency power-off (EPO)
- Hot-swappable: Replaceable batteries during operation
- Energy-saving mode available (ECO mode)
- Complete device safety through surge protection
- Prolonged battery life: minimal ripple during charging
- Low THDi value (Total Harmonic Distortion Input) to reduce mains interference
- EMI and RFI filters to prevent unwanted interference
- Charging current adjustable via the LCD display
- Intelligent charging electronics to optimize battery efficiency

Expert Power Backup 8810 Series new



Applications for Expert Power Backup

- AV racks and AV installations
- Server rooms and IT racks
- Data centers
- Applications with generators
- Retail and edge computing installations
- Banking and Financial Institutions
- Industrial Automation & Manufacturing Plants
- Broadcasting and Media Production Studios
- Laboratories and Research Facilities

Technical Specifications

Expert Power Backup	8810-1	8810-2	8810-3
Capacity	1000 VA / 1000 W	2000 VA / 2000 W	3000 VA / 3000 W
Number of batteries	2	4	6
Charging voltage	27.4 VDC ± 1 %	54.8 VDC ± 1 %	82.1 VDC ± 1 %
Input connection	IEC C14, 10 A	IEC C20, 16 A	IEC C20, 16 A
Output connections	8x IEC C13, 10 A	8x IEC C13, 10 A	8x IEC C13, 10 A 1x IEC C19, 16 A
Dimension D x W x H (mm)	410 x 438 x 88	510 x 438 x 88	630 x 438 x 88
Net weight (without battery) (kg)	6.6	9.4	12.4
Net weight (w/built-in battery) (kg)	11.6	19.5	27.5

Input

- Main input voltage: 230 V
- Frequency range: 40 Hz ~ 70 Hz
- Power factor: ≥ 0.99 @ nominal voltage (100% load)
- Harmonic Distortion (THDi): ≤ 5 % @ nominal input voltage

Output

- AC voltage regulation (Batt. Mode): ± 1 %
- Frequency range: 57 ~ 63 Hz or 47 ~ 53 Hz
- Frequency range (Batt. mode): 60Hz ± 0.1Hz or 50 Hz ± 0.1 Hz
- Current crest ratio: 3:1 (max.)
- Harmonic distortion:
 - ≤ 2 % THD (linear load)
 - ≤ 4 % THD (non-linear load)
- Transfer time
 - AC mode to battery mode: 0 ms
 - Inverter to bypass: 4 ms (Typical)
- Waveform (battery mode): Pure sinewave
- Communication ports: RS232 (Sub-D, 9-pin), USB B

Battery

- Battery type: 12 V/9 Ah
- Typical recharge time: 3 hours recover to 95% capacity for internal battery @ 2 A charging current
- Charging current: Default 2 A, max. 8 A adjustable

Efficiency

- AC mode:
 - ≥ 89 % @ full charged battery (8810-1)
 - ≥ 91 % @ full charged battery (8810-2, 8810-3)
- ECO mode: ≥ 96 % @ full charged battery
- Battery mode:
 - ≥ 88 % (8810-1)
 - ≥ 90 % (8810-2, 8810-3)

Indicators

- LCD display: UPS status, load level, battery level, Input/Output voltage, discharge timer, and fault conditions

Alarm

- Battery mode: Sounding every 5 seconds
- Low battery: Sounding every 2 seconds
- Overload: Sounding every second
- Fault: Continuously sounding

Environment

- Humidity: 20-90 % RH @ 0- 40 °C (non-condensing)
- Noise level: Less than 50dB @ 1 meter

Management

- Optional SNMP: Power management from SNMP manager and web browser with Expert Power Backup SNMP Card 7811

Order code	Product	Feature	Power supply	Number Batteries
8810-1	Expert Power Backup 8810-1	Online UPS, 1 kVA	230 V	2
8810-2	Expert Power Backup 8810-2	Online UPS, 2 kVA	230 V	4
8810-3	Expert Power Backup 8810-3	Online UPS, 3 kVA	230 V	6
7811	Expert Power Backup SNMP Card 7811	Web card for remote management, RJ45, 10/100BaseT		

