

# 2435VIP

Power supply unit 24v 3.5A

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## Key Features include:

- Power supply for 24v DC systems
- Space for 2 x 12.0 Ah batteries, which can provide 0.25A for 30 hours standby
- Capable of parallel connection for increased capacity & reliability
- Short circuit & overload protection
- Mains failure detection
- Monitors for three different battery faults
- LED confirmation of fuse failures
- Deep discharge protection for the batteries
- Tamper contacts for lid and removal
- Internal & automatic battery testing function

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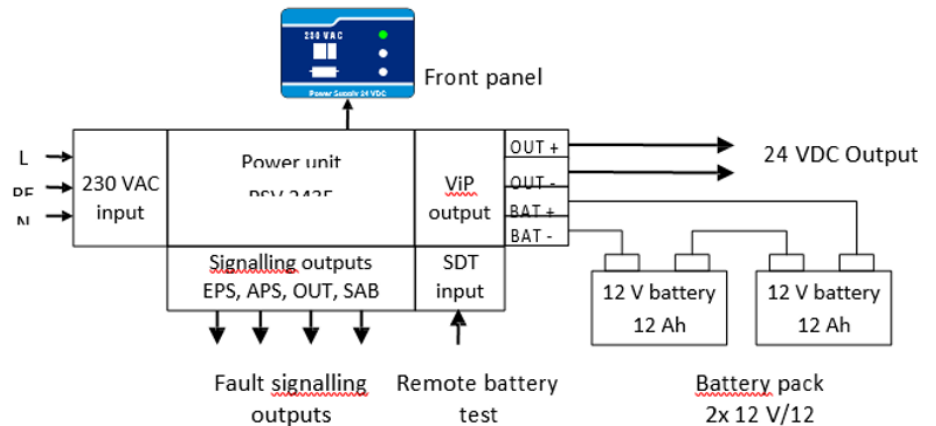
## Description

The 2435VIP PSU is an up-to date power supply unit with battery backup compliant with EN standards. Unit provides all features required by EN 50131-6:2008, security grade 3.

A distinctive and unique feature of 2435VIP PSU is the ViP mode – Voltage-in-Parallel. Power supply units with ViP feature can be connected in parallel both (+) and (-) on one common power bus without a need of additional synchronisation. Connected units, of the same operating voltage, will share load on a bus system. The ViP feature can be used to build distributed and redundant power systems. The ViP feature can also be used to compensate voltage drops on a bus by placing power supply units in distant locations, connected via the bus.

Power conversion is based on high frequency SMPS regulator providing high conversion efficiency. Low losses inside unit prevent batteries from overheating and shortening the battery life time. The computerised battery recharging circuit, works in constant potential, limited current mode, which is the best mode to provide the longest possible battery life time. The 2435VIP PSU is equipped with a built-in diagnostic system detecting and signalling mains failure, different battery failures including end-of-life warning and output faults such as low voltage or fuse failure.

## Block Diagram



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## ■ Technical Specifications

Voltage	
- Input	230V AC, 0.71A max load, 50Hz
- Output	27.6V DC
- Min output in battery mode	20V DC
- Max output ripple	<50mV peak to peak
Current consumption (at 24V DC)	
- Grade 2	0.25A for 30 hours using 2 x 12.0 Ah batteries
- Grade 3	0.74A for 12 hours using 2 x 12.0 Ah batteries
- Total maximum output	3.0A
- Battery recharge	0.5A
Battery Information	
- Capacity	2 x 12V 12.0Ah sealed lead acid, connected in series
- Recharge time	24 hours to 80% capacity
Protection & Monitoring	
- Over voltage	Triggers at 34.5V DC
- Battery low	Triggers at 22V DC
- Battery deep discharge protection	Triggers at 19V DC
- Voltage fault, output signal	Triggers at 18V DC
Indications – Internal	
- Red LED	Loss of mains voltage
- Red LED	Battery fault
- Red LED	Output voltage failure
- Yellow LED	Battery recharging enabled
Indications – External	
- Green LED	Unit healthy
- Yellow LED	Mains voltage failure
- Red & Green LEDs	Battery or output failure
- Red & Yellow LEDs	Mains voltage failure & potential battery or output fault
Ambient conditions	
- Operating temperature	-10 ... +55 °C
- Humidity (EN60721)	≤ 90% RH, non-condensing
- Housing protection (EN60529)	IP41
- Environmental class	Class II, EN50130-5:1998
Weight	Approximately 11.4Kg with 2 x 12v 12.0 Ah batteries (not supplied)
Enclosure	
- Dimensions (W x H x D)	345 x 325 x 130mm
- Material/Colour	Steel/White
- Tamper protection	Opening & removal

## ■ Accessory

Type	Art-No.	Description	Weight
AB1212-0	N54545-Z153-A100	Battery 12V 12.0 Ah	3.73 Kg

## ■ Ordering Information

Type	Art-No.	Description	Weight
2435VIP	N54545-Z153-A100	2435VIP PSU 24V/3.5A/12 Ah	3.3 Kg

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