



Load Shredder Panoptic 2000

An Innovation by Load Shredder - Specifications Document

The Panoptic 2000 by Load Shredder is an innovative Offline UPS module engineered to deliver uninterrupted power supply during outages. With its cutting-edge A-Grade EV prismatic cells, the device is optimized for maximum longevity and superior performance.



This Offline UPS mode ensures that the batteries remain offline while power is available, only coming online when power is unavailable. This operation extends the life of the batteries, providing increased efficiency and reliability during power outages. Very different from current mobile solutions positioned in this space.

The device is crafted with a high-quality Aluminium Magnesium alloy shell that offers excellent anti-corrosive and durability properties. This material makes it a suitable option for different settings, including rack-mounting for servers, wall-mounting for household distribution boards, or as a tower for point of sale, desktop, or home entertainment/gaming environments.

The Panoptic 2000 by Load Shredder is a highly efficient and dependable backup power supply option that incorporates the latest technological advancements in battery and inverter design.

This device creates the bridge between a UPS and the CPS (Continuous Power Supply) required for loadshedding in South Africa. A UPS by original design was to cater for the occasional outage, whereas our CPS device is designed to run devices on a schedule, day in and day out with short charge times.

In Depth

- An offline UPS switch module to provide full grid power without engaging batteries.
- Electric Vehicle specification prismatic cells with 4500cycles, designed to be discharged and recharged quickly and used again on a schedule with no rest in-between cycles.
- 10ms change over from power to batteries in a power outage scenario such as load shedding. Suitable for computer and sensitive equipment.
- Robust air-cooling system for long life
- 2048wh of storage coupled to a 1500watt throughput inverter. Perfect for smaller loads, servers, fridges, and household appliances
- Fully covers business and restaurant point of sale scenarios.
- Optional rack mount kit, wall mount and tower configurations.
- Permanent wiring capability for household applications following the SANS 10142 wiring standard.
- Detailed LCD screen showing the load and expected battery life at current load.
- Advanced Battery management system ensuring actively balanced cells and long battery life.
- A specialised Lithium Battery charger designed to bring the battery system up to full charge. This charger recovers 850watts per hour Charge time. A battery of 2048wh needs a little over two hours of charge time. This is well inline with every battery manufacture requirement of being less than half of the output of the device. This means that a battery of 2048wh should be charged at maximum of 1024wh to maintain the cycles advertised by the manufacture. If you are charging this faster, you are lowering the cycles of the battery cell.

Full Specifications – Panoptic 2000

AC throughput	1500watts 220v 50hz
Battery Voltage	24V (25.6V)
Storage(Wh)	2048wh
Input	
Input Voltage	220V 50hz
Output	
Continuous output maximum	1500watts
Burst output	3000watts
Over-Discharge Delay Protection	1000ms
Short Circuit Protection Delay	300us fuse
Short Circuit Protection Recovery	Disconnect load
Cell type	Electric Vehicle LiFePO4 Battery Prismatic cells
Storage temperature range	Short-Term -20°C-40°C (Within 1 month) Long-term 10°C-35°C (Within 1 year)
Operating temperature range	-15°C-60°C
Recommended temperature range	10°C-40°C
Self-Discharge (25°)	<3%/Month
Depth of discharge	>80%
Cycle Life	>4500 cycles(<0.5C)
Certification Standards	IEC/SANS/CE/EMC
Warranty	3 years