

PDSiUPS101 Zone 1 Uninterruptible Power Supply



Zone 1 UPS system provides an uninterruptible power supply to plant equipment installed in potentially explosive environments

ATEX II 2 GD Ex d IIB + H2 T4

-20°C to 30°C at full load

IP65 / 66

Overview

The PDSiUPS101 Uninterruptible Power Supply system is certified for use in Zone 1 hazardous areas and provides back up 230VAC power for up to 35 minutes, at 3KVA full load. Critical equipment and systems, such as wireless network nodes or equipment used in people tracking and automatic mustering systems, are protected in the event of a blackout or brownout.

The unit has a modular design which allows an additional battery pack to be integrated to double the backup time to a maximum of 70mins with a 3KVA load. This modular design also allows a complete additional PDSiUPS101 unit to be attached to create a system which can deliver a maximum load of 6KVA for 70 minutes at 25°C ambient temperature.

Designed to be wall mounted the PDSiUPS101 UPS system is comprised of an aluminium alloy Ex'd' charger/inverter enclosure, a stainless steel Ex'e' terminal enclosure and a stainless steel Ex'e' battery enclosure containing maintenance-free valve regulated lead acid batteries.

Access to incoming/ outgoing cables is easy due to the Ex'e' enclosure being 'close coupled' to the Ex'd' enclosure via cable bushings thus alleviating the need to open the Ex'd' enclosure. The Ex'd' enclosure has a glass window that shows various alarm and status information on the system and comes complete with door mounted Ex'd' buttons to configure the UPS charging conditions and input/ output supplies.





Features and Benefits

Equipment Protection

No loss of power to critical equipment during black & brown outs

Battery Control

The unit includes advanced battery charge control for increased battery life $% \left(1\right) =\left(1\right) \left(1$

Rugged Enclosures

Enclosures with IP54/66 ingress protection for installation in extremely arduous environments.

Backup Time

For full load, approx 35 minutes @ 25°C

Specification

Input Mains Power Supply	150-265VAC, 45-65Hz
Output Power Supply	230VAC +/- 2%, 50-60 Hz
Maximum Power Output	3KVA
Backup Time	For full load, approx 35 minutes @ 25°C or 70 minutes with additional battery enclosure
Input Battery Voltage/ Capacity	24V @ 135Ah
Alarm Output	Programmable volt free alarm contact, energised on a general alarm condition AC rating: 230V/16A DC rating: 24V/4A, max 50V/3A
Ingress Protection	Ex'd' Enclosure - IP66 Ex'e' Close couple Enclosure - IP66 Ex'e' Battery Enclosure - IP65
Weight	Ex'd' Enclosure + Ex'e' close Coupled Enclosure - 90Kg Ex'e' Battery Enclosure - 122Kg
Environmental	Operating temperature: -20°C to 30°C @3KVA / -20°C to 40°C @2.6KVA
ATEX Certification	ATEX I I 2 GD Ex d IIB + H2 T4