

## iUPS101 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 G Ex d[e] e IIB T5 Gb*

*-20°C to 55°C depending on load*

*IP Rating: iUPS101 IP66  
iBATT100 IP45*

### Overview

The iUPS101 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 at 20°C. Critical equipment, such as instrumentation and control systems, navigation or landing lighting, or blow out prevention 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 at 20°C. This modular design also allows a complete additional iUPS101 unit to be attached to create a system which can support a maximum load of 6KVA for 70 minutes at 20°C ambient temperature.

Designed to be wall mounted, the iUPS101 UPS system is comprised of an aluminium alloy Ex'd' charger/inverter enclosure, a stainless steel Ex'e' terminal enclosure and a stainless steel iBATT100 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

#### Rugged Enclosures

Enclosures with IP66/45 ingress protection for installation in extremely arduous environments.

#### Backup Time

For full load, approx 35 minutes @ 20°C

## System Run Time Table

Power (VA)	24V System Run Time (mins) @20°C	48V System Run Time (mins) @20°C
500	325	650
1000	145	290
1500	82	164
2000	54	108
2500	41*	82*
3000	35*	70*

\*Above 20°C the run time will be reduced to 20mins @24V or 40mins @48V

## Ambient De-Rating Table

Max Power	Max External Ambient						
	20°C	30°C	35°C	40°C	45°C	50°C	55°C
500	Green	Green	Green	Green	Green	Green	Green
1000	Green	Green	Green	Green	Green	Green	White
1500	Green	Green	Green	Green	Green	White	White
2000	Green	Green	Green	Green	White	White	White
2500	Green	Orange	Orange	White	White	White	White
3000	Green	Orange	White	White	White	White	White

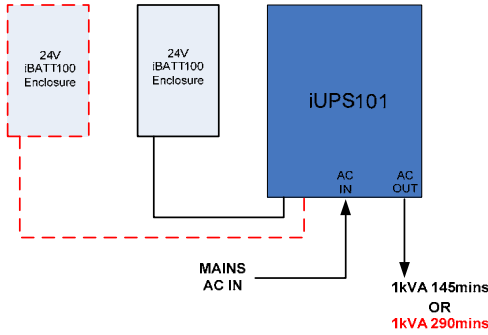
\*After running for 20mins at full load above 20°C, the max output power available will reduce by up to 15% for a 24V system.

System run times are based on battery manufacturers data. Whilst accurate to the best of our knowledge, Extronics cannot be held responsible for any discrepancies. Run times will reduce below 20°C

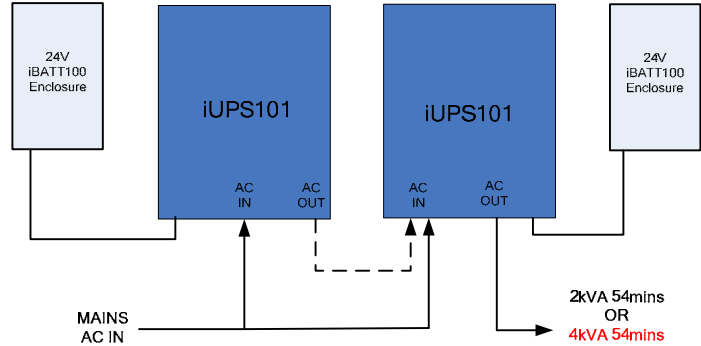
## Specification

<b>Input Mains Power Supply</b>	200-265VAC, 45-65Hz
<b>Output Power Supply</b>	230VAC +/- 2%, 50-60 Hz (reduces to min. 220VAC +/- 2% at high loads)
<b>Maximum Power Output</b>	3KVA - See de-rating table
<b>Backup Time</b>	For full load, approx 35 minutes @ 20°C or 70 minutes with additional battery enclosure. See system run time table for further details
<b>Input Battery Voltage/ Capacity</b>	24V / 48V @ 135Ah
<b>Alarm Output</b>	2 x Programmable volt free alarm contacts, energised on a general alarm condition AC rating: 230V/12A DC rating: 24V/4A, max 50V/3A
<b>Ingress Protection</b>	Ex'd' Enclosure - IP66 Ex'e' Close Coupled Enclosure - IP66 Ex'e' Battery Enclosure - IP45
<b>Weight</b>	Ex'd' Enclosure + Ex'e' Close Coupled Enclosure - 90Kg Ex'e' Battery Enclosure - 122Kg
<b>Environmental</b>	Operating temperature: -20°C to 55°C @500VA See ambient de-rating table for further details Relative humidity: 0 to 95%, non condensing
<b>ATEX Certification</b>	ATEX II 2 G Ex d[e] e IIB T5 Gb

## Alternative Configurations



**2 Batteries in Series**



**2 Systems with AC Outputs in parallel**

## Ordering Information

### iUPS101 Zone 1 UPS Enclosure

#### Specify option [#1] - Battery Voltage

24V DC (Standard run-time)  
48V DC (Extended run-time)

#### Specify option [#2] – Rated Output Power

500VA  
1kVA  
1.5kVA  
2kVA  
2.5kVA  
3kVA

#### Specify option [#3] – AC Voltage

230VAC  
120VAC (contact Extronics)

#### Specify option [#4] – AC Frequency

50Hz  
60HZ

### iUPS101-[#1]-[#2]-[#3]-[#4]

24  
48

05  
10  
15  
20  
25  
30

23  
12

50  
60

#### Installation Kit

Installation Kit for 24V UPS System  
Installation Kit for 48V UPS System

iUPS101-24IK  
iUPS101-48IK

