

## ISUPS 65WH INTRINSICALLY SAFE UNINTERRUPTIBLE POWER SUPPLY

IECEX TSA 10.0008X

### Description

The Ampcontrol 65Wh Intrinsicly Safe Uninterruptible Power Supply (IS UPS) is designed for Group I applications. The IS UPS converts 90 ~ 250 VAC mains power into intrinsically safe low voltage DC power, as well as providing battery back-up. A user accessible keypad, LCD screen, and indicator lamps allow interrogation and configuration of the IS UPS. The IS UPS is available in a range of output voltage and current levels.

The IP66 rated enclosure is constructed of stainless steel with screw terminals located within an Ex e terminal compartment for connecting the AC supply cables, output load circuits, digital inputs, relay outputs and RS-485 communication cables.

Typical applications of this power supply are voice communication systems, gas detection systems, emergency lighting, wireless access points and other electronic equipment requiring intrinsically safe Ex ia battery backed power in a Group I environment.



### Features

- Universal Input – 90~250 VAC
- IP-66 All Stainless Steel Construction
- LED Status Indication
- LCD Information Display
- RS-485 Modbus RTU Communications
- Periodic & Event Data Logging
- Configurable Shutdown Timer
- Real Time Clock
- Integral Ex e Termination compartment
- Certified Intrinsically Safe with Ex ia output

### Operation

The DC output exhibits very low output impedance. The output voltage is reduced by an average of 0.4V at full load. Precise smart current limiting provides maximum available current up to the I<sub>o</sub> parameter. The power supply output acts as a current limited voltage source. The load impedance can vary down to short circuit while the maximum output current is maintained.

The Ampcontrol Intrinsically Safe Uninterruptible Power Supply is equipped with an internal microprocessor and non-volatile memory allowing user configuration of operational parameters as well as periodic and event based data logging. Status can be viewed locally on the backlit LCD display or monitored remotely via the RS-485 communication port utilising Modbus RTU protocol.

### Replacement Terminal Cover Part Number

Part Number	Description
179492	KIT ISUPS COVER TERM 65 WH

**Part Numbers & Associated Intrinsically Safe Output Parameters**

Description (Output)	Item Number	Uo	Io	Co	Lo	L/R	Um
15.1VDC / 1.50A	110282	15.1V	1.50A	1.0µF	200µH	87.17µH/Ω	250V
		15.1V	1.50A	2.09µF	181.5µH	79µH/Ω	250V
15.1VDC / 0.51A	142541	15.1V	0.51A	1.0µF	200µH	87.17µH/Ω	250V
15.1VDC / 0.47A	142539	15.1V	0.47A	2.01µF	520µH	87.17µH/Ω	250V
15.1VDC / 0.50A	140368	15.1V	0.50A	1.0µF	200µH	87.17µH/Ω	250V
14.5VDC / 1.50A	142543	14.5V	1.50A	1.0µF	200µH	87.17µH/Ω	250V
12.6VDC / 2.5A	142545	12.6V	2.50A	2.0µF	167.2µH	33µH/Ω	250V
12.6VDC / 2.4A	140364	12.6V	2.40A	2.0µF	167.2µH	33µH/Ω	250V
12.6VDC / 2.0A	140365	12.6V	2.00A	502nF	164µH	40.1µH/Ω	250V
		12.6V	2.00A	20.54µF	102.1µH	39µH/Ω	250V

**Specifications**

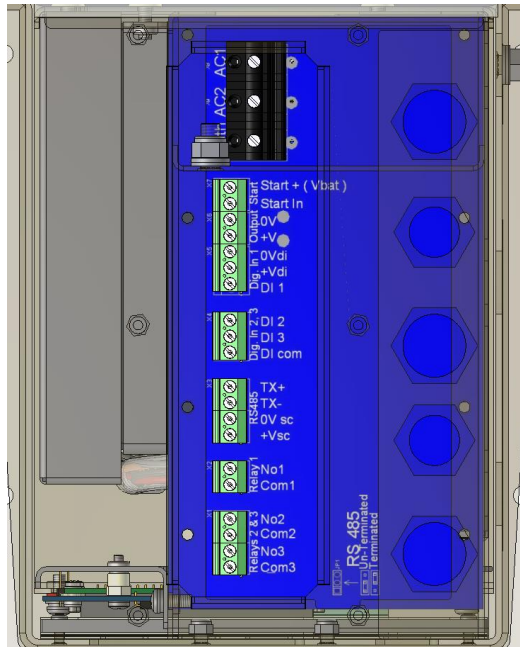
**Mechanical Specifications**

Dimensions (mm)	180 W x 200 H x 210 D
Weight	12kg
Operating Temp.	-17°C to +60°C
Ingress Protection	IP66

**Electrical Specifications**

Supply Voltage	90-250Vac, 50/60Hz
Max. Current Draw	1A @ 100VAC

**Electrical Connection & I.S. Parameters**



**Terminal X1 : Relay 2 & 3**

Ui = 30V  
Ii = 3A  
Uo = 0 V

**Terminal X2 : Relay 1**

Ui = 30V  
Ii = 3A  
Uo = 0V

**Terminal X3 : RS-485**

**Tx+,Tx- (Pins 1 & 2)**

Ui = 7.14V  
Ci = 0.221µF  
Li = 0µH  
Uo = 5.88V  
Io = 124mA

**PSU (Pins 3 & 4)**

Ui = 16.5V  
Ii = 2.8A  
Ci = 0µF  
Li = 0µH

**Terminal X4 : Digital Input 2 & 3**

Ui = 16.5 V  
Uo = 0V

**Terminal X5 : Digital Input 1**

Uo = 16.5V  
Io = 16.8 mA  
Lo = 100µH  
Co = 1µF

**Terminal X6 : DC Output**

Model dependent, refer to ordering table

**Terminal X7 : External Start Push Button**

Uo = 32.5V  
Io = 24mA  
Lo = 100µH  
Co = 0.04µF

**Terminals X8, X9, X10 : Mains Supply Input**

Um = 250 VAC

**DISCLAIMER**

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