

# Power Supply

PSU 241038



## Introduction

High efficiency cost effective power supply ideal for use in Fire, Access Control and General Security applications. Featuring a regulated 27.6V dc output supplying continuous full rated current to load plus additional current for charging 2 x 12V standby batteries. Maximum battery life is assured using deep discharge protection to prevent premature battery failure when operating in standby mode for extended periods.

Two sets of volt-free contacts are provided to signal (i) loss of mains (ii) battery and loss of output faults. The universal mains input voltage enables the power supply to be used across a wide geographical area. The highly efficient switch mode design ensures low operating costs, generates less heat and with a small physical size increases the room available for additional PCBs or cables. The modular construction simplifies maintenance.



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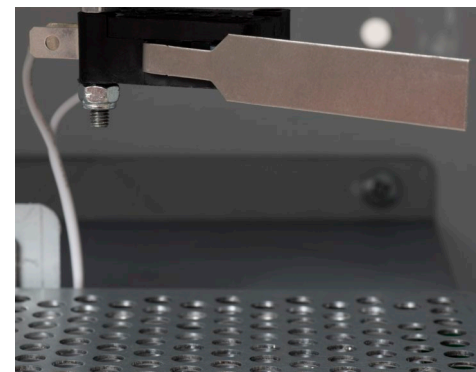
Edition date: 11<sup>th</sup> May 2021

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## Features & Benefits

- Maximum 10A load current to load at 27.6V dc nominal regulated output.
- Load output decreases to charge batteries, when required.
- Input voltage sensing 100-240v AC.
- Local visual fault indications with numerous faults detected and indicated.
- Remote fault signalling via normally closed contacts.
- Protection devices for overload and reverse connections
- Charging capability to support 17 or 38Ah batteries with intelligent load enhancement.
- Electronic overload protection shuts down output until overload or short circuit is removed.
- Battery Monitor detects battery missing, low battery, short-circuit or reverse connection.
- Battery charging circuit is energised only when a battery is connected correctly, and the battery voltage is greater than 14V.
- Continuous output when transferring from mains to battery and/or back to mains during automatic connection of battery to load on loss of mains.
- Deep discharge protection disconnects battery from load when battery voltage falls to 21V.
- Dedicated cable access top, bottom, and rear



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## Technical Data

### Mains Input

Supply Voltage	110-240v Ac @ 50Hz
Input Current	<4.0 Amps at 10A load
Inrush Current	30A maximum at 25°C 110v AC for 10mS

### Output

Voltage at 10A load	
Mains Power	26.0 – 28.5 (range) 27.6v Dc nominal
Battery Standby	18 – 26v DC
Ripple	<100mV peak to peak max at rated voltage
Fuse	
Load	F10.0A
Battery	F10.0A
Overload	Electronic shutdown at 15.0A until resolved
Battery Selection	18 or 38Ah batteries – two required
Low battery threshold	23v
Deep discharge protection	21v
Quiescent Current	
No load	30mA
Battery cut off	0mA

### Mechanical

Enclosure Dimensions	425 x 425 x 180 mm (w x h x d)- including lid
Construction	1.2mm mild steel, powder coated
Colour	White (RAL 9003)
Gross Weight*	9.63Kg
Nett Weight*	9.2Kg

### Environmental

Operating Temperature	-10 to +40°C at 75% RH non-condensing
Storage Temperature	-20 to +80°C
IP Rating	IP30
IK Rating	IK08
Installation	Internal use only

### Tamper Protection

Lid Opening	Yes
Removal	Yes

### Signalling

LED's	Mains connected and multiple fault scenarios
General Fault Relay	0.10A 60v DC 16Ω, N/C contacts
EPS Fault Relay	0.10A 60v DC 16Ω, N/C contacts, 10s delay for mains failure

\*Excludes Batteries

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## Ordering Info

Article number

N54545-Z166-A100

## Accessories

PS12170 Battery 12v/17.0Ah flame retardant battery

N54545-Z158-A100

PS12380 Battery 12v/38.0Ah flame retardant battery

N54545-Z160-A100



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