

## Maintenance

There is no regular maintenance required of the PSU other than periodic testing and replacement of the standby battery. **Reference should be made to the battery manufacturer's documentation to determine typical/expected battery life with a view to periodic replacement of the battery.**

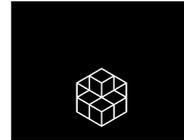
If the output of the PSU fails the cause of the failure should be investigated e.g. short circuit load. The fault should be rectified before restoring power to the PSU. The fuses may need to be replaced. Ensure the correct fuse rating and type is used.

## CAUTION

**Risk of explosion if battery is replaced by an incorrect type.  
Dispose of used batteries according to the battery manufacturer's instructions and all local and national regulations.**

The packaging supplied with this product may be recycled.  
Please dispose of packaging accordingly.

[www.elmdene.co.uk](http://www.elmdene.co.uk)



**ELMDENE**

Security & Fire  
Products

ELMDENE INTERNATIONAL LIMITED  
RODNEY ROAD  
FRATTON  
PORTSMOUTH  
PO4 8SS, UK  
TEL: +44 (0) 2392 739412  
FAX: +44 (0) 2392 811631

[www.elmdene.co.uk](http://www.elmdene.co.uk)



## G13804NA-x-s and G13805NA-x-s

### 13.8vc 4A and 5A Switch Mode Power Supplies with Fused Outputs\*

(In part number: "x" is output module type, "s" is enclosure model)

#### Features

High efficiency cost effective power supply ideal for use in Intruder, Access Control and general PSU applications. Featuring a regulated 13.8V dc output supplying continuous full rated current to load and a universal mains voltage input. Standby battery recharging is achieved within 24h for an 18Ah battery. An integrated output module allows multiple circuits to be individually fused\*.

- Continuous full rated current to load.
- 18Ah Standby battery recharged to 80% within 24 hours.
- Universal mains input voltage 90-264Vac\*
- Load output features full electronic short circuit and overload protection under mains operation.
- Mains transient protection circuit.
- Box lid tamper circuit.
- Mains present LED.
- Individually Fused Outputs\*\*

\* In accordance to Low Voltage 2006/95/EC Compliance testing

\*\* Dependent upon model.

#### Compliance

This power supply unit complies with the following European Directives:

Low Voltage 2006/95/EC    EMC 2004/108/EC    WEEE 2002/96/EC    RoHs 2002/95/EC

#### Input Specification

Voltage	90-264Vac
Frequency	50-60Hz
Max current	2A @ 100 vac
Mains Input Fuse	T3.15A 20mm 230v HRC
Battery Capacity	1 x 18Ah Valve Regulated Lead Acid (NP18 size)

## Output Specification

<b>Model</b>	<b>G13804NA- x-s</b>	<b>G13805NA- x-s</b>
<b>Voltage</b>	13.5 – 14.2Vdc (13.8 nominal) on mains power	
<b>Ripple</b>	150mV pk – pk max	
<b>Max load Current</b>	4.0A continuous	5.0A continuous
<b>Overload</b>	Electronic shutdown until overload / short circuit removed.	

## Fusing

<b>4A Model</b>	<b>G13804NA-s</b>	<b>G13804NA-4-s</b>	<b>G13804NA-8-s</b>
Output Fuse: 20mm glass	F4.0A	4 x F1.0A	8 x F500mA

<b>5A Model</b>	<b>G13805NA-s</b>	<b>G13805NA-4-s</b>	<b>G13805NA-8-s</b>
Output Fuse: 20mm glass	F5.0A	4 x F1.25A	8 x F630mA

## Standby Battery

Battery Capacity	1 x 18Ah Valve Regulated Lead Acid (NP18 size)
Recharge Time	24hours to 80% from 100% discharge
Battery Fuse protection	F1.6A 20mm glass

## Local Indicators

MAINS LED (Green)                      Mains present

## Signalling Outputs

Lid Tamper                                      3A @ 125Vac N/O volt free contact.  
 Note: Contact open when lid opened by normal means (TAMPER ACTIVE condition).

## Mechanical

<b>Model</b>	<b>G13804NA-x-B</b> <b>G13805NA-x-B</b>	<b>G13804NA-x-C</b> <b>G13805NA-x-C</b>
<b>Enclosure Dimensions</b> w x h x d (mm)	355 x 330 x 80	330x 275 x 80
<b>Weight (kg)</b> excluding battery	3.8	3.6
<b>Material</b>	White powder coated steel	

## Environmental

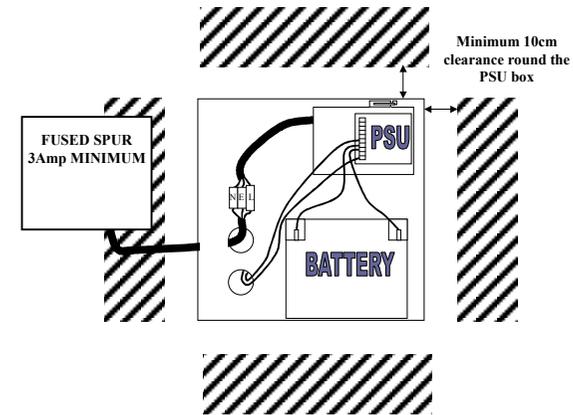
Temperature                                      -10 to +40°C (operating) 95% RH non-condensing  
 20 to +80°C (storage)

## Connections

+LOAD    +ve voltage O/P to load equipment  
 -LOAD     -ve voltage O/P to load equipment  
 +BATT     Red lead to standby battery  
 -BATT     Black lead to standby battery

## Installation Instructions

This unit is only suitable for installation as permanently connected equipment. The PSU is *NOT SUITABLE* for external installation. *EQUIPMENT MUST BE EARTHED*. Before installation, ensure that external disconnect device is *OFF*.



## Mounting

- 1) Mount securely allowing minimum clearance – see diagram.
- 2) Route mains and LV output cables via different knockouts and/or cable entry holes.
- 3) Use bushes and cable glands rated to UL94 HB minimum.

## Mains Power Up

- 4) Attach correctly rated mains cable and fasten using cable ties.
- 5) Apply mains power. Check for 13.8v on load outputs. Check green Mains LED is on.
- 6) Disconnect mains power.

## Load Output

- 7) Attach supplied battery cables to terminal block and battery.  
**NOTE:** ensure correct polarity of battery connections: **+ve** use **red** lead, **-ve** use **black** lead.
- 8) Apply mains power. Check green Mains LED is on.
- 9) Disconnect mains power. Check that the batteries continue to supply voltage and current to the load. The Green LED should be off.  
**NOTE:** Batteries must have sufficient charge to supply the load
- 10) Reconnect mains. Green LED should be on.

## Tamper

- 11) Check that the tamper spring makes good contact with box lid when closed. Check that the tamper switch is:
  - closed when the lid is closed and the lid screw is fitted
  - open when the lid is open.

## Operating Instructions

This unit is intended for use by Service Personnel only - There are NO USER SERVICEABLE parts inside.

The green Mains LED will be illuminated whilst the mains supply is present.