

# ELMDENE

Protecting People & Property

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**12V dc 4A**

**VRS124000-x-y**

**1, 2, 4 or 8 Fused Outputs**

**Low Profile CCTV  
SMPSU**

Where 'x' is the number of fused outputs (model dependent)  
Where 'y' is the enclosure type 'A', 'T' or 'J'

- Low profile enclosure
- Universal mains input voltage 90-264V ac
- High efficiency electronics for reduced running costs and lower operating temperatures
- Continuous full rated current to load
- Installer safe design with all high voltage electronics fully shrouded
- Modular construction for ease of maintenance & installation
- Individual channel LED health indication
- Lockable lid - (T-Enclosure only)
- Available in 1, 2, 4, 8 channel versions (model dependent)
- Individually Fused or PTC protected outputs (model dependent)
- Cable access available via 20mm cable gland knockouts or rear panel
- Full electronic short circuit and overload protection on load output
- Mains transient protection circuit
- Green 'Mains Present' LED
- Red 'Fault' LED

## FEATURES

The VRS124000-x-y range consists of high efficiency cost effective power supplies, ideal for use in CCTV applications. They feature a regulated 12V dc SMPS module, continuously supplying full rated current to load, while the universal mains input voltage enables the power supply to be used across a wide geographical area. The highly efficient switch mode design generates less heat and ensures low operating costs. The modular construction simplifies maintenance and the fused output module allows multiple circuits to be individually protected, with the inclusion of PTC (self-resetting) options. Presented in white, powder coated metal enclosures with hinged lids, the VRS124000 PSU family offers a discrete and secure installation for any CCTV installation.

## OPERATION

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. In the event of a fault condition, the red Fault LED will also be illuminated on the module.

## MODELS

4A Models	Fused Outputs	PTC Rating (20°C)	Enclosure
VRS124000-J	1 x 4A		188H x 205W x 60D Small Low Profile Hinged Lid
VRS124000-2-J	2 x 2A		
VRS124000-4-J	4 x 1A		
VRS124000-8-J	8 x 0.5A		
VRS124000-4PTC-J	4 x 1A (PTC)	$I_H=1.1A / I_T=2.2A$	
VRS124000-8PTC-J	8 x 0.5A (PTC)	$I_H=0.5A / I_T=0.9A$	
VRS124000-4-T	4 x 1A		310H x 245W x 60D Large Low Profile Hinged Lid
VRS124000-4-T-T*	4 x 1A		
VRS124000-8-T	8 x 0.5A		
VRS124000-4-A	4 x 1A		200H x 230W x 80D Hinged Lid
VRS124000-8-A	8 x 0.5A		
VRS124000U	N/A		Unboxed Module

\* With Enclosure Front Lid Tamper

## INSTALLATION AND SET-UP

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*. The PSU should be installed according to all relevant safety regulations applicable to the application.

### Mounting

1. Mount securely in correct orientation using the 3 available mounting holes.
2. Route mains and low voltage output cables via different knockouts and/or rear cable entry holes.
3. Use bushes and cable glands rated to UL94 HB minimum.

### Mains Power Up

1. Attach correctly rated mains cable (minimum 0.5mm<sup>2</sup> [3A], 300/500V ac) and fasten using cable ties.
2. Apply mains power. Check for 12V dc on load outputs. Check green Mains LED is illuminated on the modules.
3. Disconnect mains power.

### Load Output

1. Attach correctly rated load cable and fasten using cable ties. Note polarity.
2. Re-apply mains power. Check green Mains LED is on.
3. Check Red Fuse Output Module LED's are illuminated.
4. Verify load is operating correctly.

## MAINTENANCE

There is no regular maintenance required of this PSU.

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 glass fuse(s) may need to be replaced - ensure the correct fuse rating and type is used. In the case of the PTC fuse models these will automatically reset once the fault is removed.

## DISPOSAL OF PRODUCT AT END OF LIFE

This product falls within the scope of EU Directives 2012/19/EU Waste Electrical and Electronic Equipment (WEEE). At the end of life, the product must be separated from the domestic waste stream and disposed via an appropriate approved WEEE disposal route in accordance with all national and local regulations.

For more information see: [www.recyclethis.info](http://www.recyclethis.info)

## SPECIFICATION

### Input Specification:

	<b>VRS124000-x-y</b>
Voltage (rated)	100-240V ac
Voltage (operating)	90-264V ac
Frequency	50-60Hz
Mains Input Fuse (Terminal)	T2.0A HRC
Module fuse - Mains	T2.0A HRC
Max standby Power	0.5W (no load connected)
Max Mains Input Current	1.5A

### Output Specification:

Voltage	11.4 – 12.6V dc (12V dc nominal)
Max load current	4A
Ripple	150 mV pk-pk max
Module Output Fuse	F4.0A
Overload	Electronic shutdown until overload or short circuit removed

### Local Indicators

MAINS LED (Green)	Mains present
Fault LED (Red)	Module O/P Fuse blown
FOM Health LED's (Red)	Illuminated – Healthy

### Mechanical

	J - Enclosure	T - Enclosure	A - Enclosure
Enclosure Dimensions <b>h x w x d (mm) [external]</b>	188 x 205 x 60	310 x 245 x 60	200 x 230 x 80
Weight	1.5kg	2.5kg	2.3kg

### Environmental

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

This product meets the essential requirements of the following EU Directives:

Low Voltage:	2014/35/EU
EMC:	2014/30/EU
RoHS3:	2015/863
WEEE:	2012/19/EU



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

### Explanation of symbols: (Not all may apply)



Fault Indication



Shock Risk - isolate before attempting access



Mains Present



Certification Level



Protective Earth



Do not dispose of in unsorted waste

Specifications subject to change without notice