

# ELMDENE

Protecting People & Property

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**12V dc 2A / 4A**  
**IP66 CCTV SMPSU**  
**Range**

**VRS122000-PTC-P**  
**VRS124000-xP**

1 PTC Fused Output

1, 2, 4 or 8 Fused Outputs

Where 'x' is the number of fused outputs (model dependent)

- IP66 plastic enclosure
- Universal mains input voltage 90-264Vac
- 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
- Individual channel LED health indication (multi-channel variants)
- Available in 1, 2, 4, 8 channel versions (model dependent)
- Individually Fused or PTC protected outputs (model dependent)
- Cable access available via IP rated cable glands
- Full electronic short circuit and overload protection on load output
- Mains transient protection circuit
- Green 'Mains Present' LED

## FEATURES

The IP rated VRS range consists of high efficiency cost effective power supplies, ideal for use in external 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 with onboard fuses, allows multiple circuits to be individually protected, with the inclusion of a 2A PTC (self-resetting) variant. Presented in plastic IP66 enclosures with removable lids, the VRS IP PSU family offers an ideal 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 (model dependent).

## MODELS

2A Model	Fused Outputs
VRS122000-PTC-P	1 x 2A (PTC)
4A Models	Fused Outputs
VRS124000-P	1 x 4A (Glass)
VRS124000-2P	2 x 2A (Glass)
VRS124000-4P	4 x 1A (Glass)
VRS124000-8P	8 x 0.5A (Glass)

## INSTALLATION AND SET-UP

This unit is only suitable for installation as permanently connected equipment. 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 4 available mounting holes through the lid screw apertures.
2. Route mains and low voltage output cables via different knockouts.
3. Use bushes and cable glands rated to a minimum of IP66 rating.

### 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 (4A model only).
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 (4A model only).
3. Check Red Fuse Output Module LED's are illuminated (4A model only).
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:

	<i>VRS122000-PTC-P</i>	<i>VRS124000-xP</i>
Voltage (rated)	100-240V ac	
Voltage (operating)	90-264V ac	90-264V ac
Frequency	50-60Hz	
Mains Input Fuse (Terminal)	N/A	T2.0A HRC
Module fuse - Mains	N/A	T2.0A HRC
Max standby Power	0.5W (no load connected)	
Max Mains Input Current	1.5A	1.5A

### Output Specification:

Voltage	11.4 – 12.6V dc (12V dc nominal)	
Max load current	2A	4A
Ripple	150 mV pk-pk max	
Module Output Fuse	N/A	F4.0A
PTC Output Fuse @20°C	Itrip = 5.0A , Ihold = 2.5A	N/A
Overload	Electronic shutdown until overload or short circuit removed	

### Local Indicators (4A model only)

MAINS LED (Green)	Mains present
FAULT LED (Red)	Fault present: Output fuse fail (requires load to be connected).
Health LEDs (Red)	Healthy Channel

### Mechanical

	<i>VRS122000-PTC-P</i>	<i>VRS124000-xP</i>
Enclosure Dimensions <b>h x w x d (mm) [external]</b>	130L x 80W x 75D	250L x 150W x 100D
Weight	485g	990g

### Environmental

Enclosure	IP66
Temperature	-10 to +40°C (operating) 95% RH non-condensing -20 to +80°C (storage)

**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