

ELMDENE

Protecting People & Property

Elmdene International Ltd
3 Keel Close, Interchange Park,
Portsmouth, Hampshire, PO3 5QD, UK

Tel: +44 (0)23 9269 6638
Fax: +44 (0)23 9266 0483
Web: www.elmdene.co.uk

12vdc 4A/8A/16A/20A	VRS124000-x-y	1, 2, 4 or 8 Fused Outputs
Low Profile CCTV SMPSU	VRS128000-x-y	2, 4, 8 or 16 Fused Outputs
	VRS1216000-x-y	16 Fused Outputs
	VRS1220000-x-y	20 or 24 Fused Outputs

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

- Low profile 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
- Modular construction for ease of maintenance & installation
- Individual channel LED health indication
- Lockable lid - (T-Enclosure only)
- Available in 1, 2, 4, 8, 16, 20 or 24 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 VRS12x000-x-y low profile range consists of high efficiency cost effective power supplies, ideal for use in CCTV applications. They feature regulated 12.0vdc SMPS modules, continuously supplying full rated current to load, while their 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. Presented in a low profile enclosure with a lockable lid (T-Enclosure), the VRS12x000 PSU family offers a discrete and secure 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

Model	IP66	Load Current	Fused Outputs
VRS124000-J			1 x 4A
VRS124000-P			1 x 4A
VRS124000-2-J			2 x 2A
VRS124000-2P	Yes		2 x 2A
VRS124000-4-A			4 x 1A
VRS124000-4-J			4 x 1A
VRS124000-4-T			4 x 1A
VRS124000-4-T-T*		4A	4 x 1A
VRS124000-4P	Yes		4 x 1A
VRS124000-4PTC-J			4 x 1A (PTC)
VRS124000-8-A			8 x 0.5A
VRS124000-8-J			8 x 0.5A
VRS124000-8-T			8 x 0.5A
VRS124000-8P	Yes		8 x 0.5A
VRS124000-8PTC-J			8 x 0.5A (PTC)
VRS124000U**			N/A
VRS128000-2-T			2 x 4A
VRS128000-4-T		8A	4 x 2A
VRS128000-4PTC-T			4 x 2A (PTC)
VRS128000-8PTC-T			8 x 1A (PTC)
VRS1216000-16		16A	16 x 1A
VRS1216000-16-S			16 x 1A
VRS1220000-20PTC-S		20A	20 x 1A (PTC)
VRS1220000-24-S			24 x 0.8A

*** With Tamper ** Unboxed**

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 (4A model = minimum 0.5mm² [3A], 300/500Vac, 8A model = minimum 0.75mm² [6A], 300/500Vac) and fasten using cable ties.
2. Apply mains power. Check for 12.0Vdc 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. 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 fuse(s), if fitted, may need to be replaced. Ensure the correct fuse rating and type is used.

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

SPECIFICATION

Input Specification

	VRS124000-x-y	VRS128000-x-T	VRS1216000-x-y	VRS1220000-x-y
Voltage (rated)	100-240Vac		100-120Vac or 200-240Vac* Switch selectable	
Voltage (operating)	90-264Vac	90-264Vac		
Frequency	50-60Hz			
Mains Input Fuse (Terminal)	T2.0A HRC	T3.15A HRC	T6.3A HRC (100-120Vac) T3.15A HRC (200-240Vac)*	
Module fuse - Mains	T2.0A HRC	T2.0A HRC (x2)	N/A	
Max standby Power	0.5W (no load connected)	1.0W (no load connected)	N/A	
Max Mains Input Current	1.5A	3.0A	N/A	

Default Setting *

Output Specification (per power module)

Voltage	11.4 – 12.6vdc (12.0vdc nominal)		10.0 – 14.0Vdc (Adjustable)	
Max load current (per module)	4A (VRS124000-x-y / VRS128000-x-y)		16A	20A
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)

Fault present: Output fuse fail
(requires load to be connected)

Mechanical

	J - Enclosure	T - Enclosure	S – Enclosure
Enclosure Dimensions h x w x d (mm) [external]	188 x 205 x 60	310 x 245 x 60	345 x 288 x 90
Weight	1.5kg (4A model)	2.5kg (4A model) 2.7kg (8A model)	3kg

Environmental

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
RoHS2: 2011/65/EU
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