

Audio Amplifier Power Supply VA300 PSU+/VA300



- Four independent power supply outlets
- DC 48 V battery input
- Plug in/out

The VA300/PSU+ is an AC to DC converter unit designed specifically for use in critical life safety voice and alarm broadcast systems. The VA300/PSU+ energises up to four VA300+ audio amplifiers sited in a VA300/CAGE and incorporates no break electronic changeover to an external optional battery sub-system in event of primary AC mains disconnection. The unit consists of four supply converters conveniently fitted in a VA300/PSU+ single housing, each supply is supervised by an integral monitoring sub-system which drives fascia mounted indicators and a volt free power supply status is available to remote possible trouble report.

The unit is housed in a low profile module which connects to the host equipment by plug/socket terminations. VA300/PSU+ is designed for standard 19 inch rack mount execution and high power density enables a 2 unit high 252 mm deep footprint. The unit enables compliance with IMO standard for broadcast equipment (i.e. separate power supplies for each amplifier module) and meets emission and susceptibility standards to IEC60945. Switch-on surge is managed by staged AC mains connection and full thermal protection is included as well as comprehensive protection for each power supply channel. A timed delay is incorporated to prevent surges due to toroidal transformer residual flux polarity and a 60 A rated connector facilitates connection to an external battery pile. This product should be fed from an AC mains supply via a type D breaker. The VA300+ is designed for simple rapid installation and utilises plug/socket connectivity thereby obviating screw/bolt termination. Light weight construction enables safe/convenient transportation and installation into the target equipment.

Technical data

Power supply input	AC 115 V or AC 230 V ± 5 %
Frequency	50/60 Hz ± 5 %
Maximum power demand	1.8 kVA
Output	unregulated DC 48 V, four channels
Output capability per channel	1 x VA 300 power amplifier module
Dimensions (width x height x depth)	483 mm x 88 mm x 252 mm (19.02 inch x 3.46 inch x 9.92 inch) (19" rack mount, 2 unit)
Weight	15 kg (33.1 lbs)
Enclosure	sheet steel zinc
Finish	zinc and passivated
Fascia	alloy
Finish	semi gloss black
Temperature range	-20 °C to +50 °C (-4 °F to +122 °F)
Humidity	80 % non condensing

Amplifier Fan Unit VA300/FAN



- Three fan assemblies
- Rapid service
- Space saving, light weight

The PSC VODEC VA300/FAN is an industrial cooling unit designed to provide efficient airflow through a VA300/CAGE (and associated VA300+M amplifiers) to enhance equipment reliability in elevated ambient temperatures. The unit comprises of a low profile space saving 1 unit high 19 inch rack mount enclosure, arranged to allow usage in minimal depth shallow cabinets.

The complete fan sub-system is automatically supervised under host management control by periodic activation for several rotations during which time sensing electronics determines fan unit status. The VA300/FAN is configured for plug in/out connectivity to facilitate rapid service and minimise down time in event of maintenance.

Technical data

Mains supply	DC 48 V, unregulated supply
Voltage tolerance	DC 36 V to 56 V
Supply current	259 mA
Power consumption	12 W
Enclosure	extruded alloy anodised
Dimensions (width x height x depth)	483 mm x 44.5 mm x 160 mm (19.02 inch x 1.75 inch x 6.30 inch) (19" rack mount, 1 unit)
Weight	1.56 kg (3.4 lbs)
Temperature range	-20 °C to +50 °C (-4 °F to +122 °F)
Humidity	80 % non condensing
Levels	background level 45 dBA operating level 57 dBA fan noise level 12 dBA
Noise	> 12 dBA@1 meter from fans