

FM Power Amplifier

VL 3 – 2500 W

This innovative and compact amplifier is able to satisfy the strictest requests of all end-users who are looking for high reliable and top-quality equipment at competitive prices.

All the declared operational parameters are assured in the entire frequency range and for extreme environmental conditions.

Thanks to the advanced approach in the design focused on low power consumption and linearity over the entire operative band, we estimate a 20% longer MTBF with respect to the average standard equipment available in the market.



The equipment complies with the RTTE European Requirements.

- Mosfet technology
- User friendly for monitoring and control
- Double stage power supply
- Fast and multiple protections
- Modular design for quick and easy maintenance
- Flexible telemetry system and remote control
- N+1 Hardware and software control facility

CODE	MODEL	DESCRIPTION
F869	VL 3	2500 W Power Amplifier 87.5-108 MHz

Technical data

RF OUTPUT SPECIFICATIONS		REMOTE CONTROL	
Range	87,5 ÷ 108 MHz	Output Connector	RS232 interface Connector DB9 Male – Two Connector DB9 Female programmable – RS 485 – Connector DB15 Male
Overall efficiency	Better than 58 %	Output Connector Analogue	Signal proportional to the output voltage of the power supply module Signal proportional to the current supplied by the power supply module Signal proportional to the square root of the direct power Signal proportional to the square root of the reflected power
Impedance RF Connector	50 Ohm input and output	Output Connector Digital	“Stand-by” signal (contact is N.C. in normal operations, connected to GND in stand-by mode) “N.O.” alarm contact (contact is not connected in normal operation, connected to pin 15 in alarm) “N.C.” alarm contact (connected to pin 15 in alarm, contact is not connected in normal operation)
Output power stability	± 3 %	Input Connector	Stand-by command Reset command
Harmonics suppression	≥ - 80 dBc (typically better than 90 dBc)	Ethernet interface (option)	Connector RJ 46 WEB browser or SNMP client
Spurious Emission	< 1 µW (without Modulation)	STANDARDS COMPLIANCE	
Residual Asynchrony AM	- 74 dB Weighed	Radio spectrum	ETSI 302-018
Residual Synchrony AM	- 58 dB Weighed	EMC	ETSI 301-489
Probe	BNC connector RF – 60 dBc	Safety	EN 60950 - EN 60215
POWER SUPPLY		TEMPERATURE	
Type	Switch mode (Double conversion voltage direct mains)	Operating range	0° to 45° C
Protections	RF Amplifier module over-temperature 70 Excessive reflected power Permissible VSWR ≤ 1.5	Storage range	- 40° to 70° C
Programmable logic protection	Stopping of the unit after 8 alarms Stopping of the unit after 16 alarms	Maximum relative Humidity	90% @ 26 °C non condensing
Logic protections reset	Manual , Remote or Automatically every 24 hours	Max Operating Altitude	2500 mt. a.s.l.
Controls	Mains - DB 15 Connector (Stand-by and Reset command)		
Alarm	Excessive output SWR (red led) 50 W adj. – Alarm (red led) - Stand –by (yellow led) - Mains - DC out – ALC		
Type	Solid state direct FM frequency		



SPECIFICATIONS	VL3
RF output power	2500 W
Nr. of Transistors	8 MOS-FET SD 2942
RF Input (Nominal Level)	40 W
Output Connector	7/8 EIA
Dimensions (WxHxD) mm	(482 x 220 x 700) + (482 x 88 x 700)
Weight	30 + 14 Kg
Power consumption	Approx. < 4800 VA
Power supply req.	three-phase 380 Vac ± 15% / 230 Vac mono-phase
Nr. of power supply boards	3
Number of fans	2 blowers for each PA & PS module