

## VL 3 | 2500W

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
<b>0000130268</b>	VL 3	2500 W Power Amplifier 87.5-108 MHz
<b>Option and accessories</b>		
<b>0005310003</b>	DRIVER	TX250/S PLUS 250 W Stereo, Mono, MPX Transmitter
<b>0005310034</b>	DRIVER	TX300 300 W Stereo, Mono, MPX Transmitter
<b>0005310038</b>	DRIVER	TX300 300W TRASM. FM STEREO, MONO, MPX OPZ. A e B
<b>0000170399</b>	RACK	Cabinet 15 Unit 19" complete with cable and Earth Bar for transmitter

## ❖ TECHNICAL DATA ❖

### RF OUTPUT SPECIFICATIONS

Range	87,5 ÷ 108 MHz
Overall efficiency	Better than 58 %
Impedance RF Connector	50 Ohm input and output
Output power stability	± 3 %
Harmonics suppression	≥ - 80 dBc (typically better than 90 dBc)
Spurious Emission	< 1 µW (without Modulation)
Residual Asynchrony AM	- 74 dB Weighed
Residual Synchrony AM	- 58 dB Weighed
Probe	BNC connector RF – 60 dBc
Protections	RF Amplifier module over-temperature 70 Excessive reflected power Permissible VSWR ≤ 1.5
Programmable logic protection	Stopping of the unit after 8 alarms Stopping of the unit after 16 alarms
Logic protections reset	Manual , Remote or Automatically every 24 hours
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

### POWER SUPPLY

Type	Switch mode (Double conversion voltage direct mains)
Settings	Single Phase; Mono Phase by internal jumper

### REMOTE CONTROL

Output Connector	RS232 interface Connector DB9 Male – Two Connector DB9 Female programmable – RS 485 - Connector DB15 Male
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
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)
Input Connector	Stand-by command Reset command
Ethernet interface (option)	Connector RJ 46 WEB browser or SNMP client

### STANDARDS COMPLIANCE

Radio spectrum	ETSI 302-018
EMC	ETSI 301-489
Safety	EN 60950 - EN 60215

### TEMPERATURE

Operating range	0° to 45° C
Storage range	- 40° to 70° C
Maximum relative Humidity	90% @ 26 °C non condensing
Max Operating Altitude	2500 mt. a.s.l.

### SPECIFICATIONS

UL 3

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 fan per each power supply module    2 fan per RF module
Nominal air volume at 1000 hPa barometric pressure	740 m3/min