



ATV High Power

for VHF and UHF Amplifiers



The amplifiers in **TV High Power amplifiers** series are designed to simplify transport and installation, ensuring high working reliability.

The high modularity, high power density, low weight, satisfy the most demanding installations.

Furthermore, the high efficiency allows a very low operative cost.

Thanks to the high linearity of the amplifiers, achieved with the use of latest 50V LDMOS devices technologies the performance with analogue and digital TV signals are excellent.

Each Power Amplifier drawer is equipped with an autonomous LCD and keyboard user interface, AC power supplies and cooling. Moreover, each PA can be used in a stand-alone operation without any external hardware and/or software additional tools. Forcing the design using strongly oversized components and parts, at least with two items, allow an intrinsic native redundancy concept (LDMOS, Power Supplies, Cooling, Heat-sink) saving space and MTBF.

The cooling of the amplifiers is guaranteed by an extremely noiseless forced air cooling system.

The presence of a Control Unit that collects all measures from amplifiers and from antenna system



ensure a single control point to access to all MOSFET currents, power supplies voltages, temperatures of the heat sinks, amplifiers output powers together with the RF power reading of the output antenna system. A multifunction display on the Control Unit makes it possible to verify all the operating parameters of the unit.

The amplifiers in the series are remotable by wired telemetry connector or by serial communication, or with optional Web Server and SNMP interface.

Main characteristics

- Latest LDMOS Technology for UHF and VHF Versions
- Forced-air Cooling System
- Analog and Digital Signal Input
- High Efficiency
- Remote Control Wired and Serial (RS232/485), SNMP, Web Server
- All Voltages and Currents Available on display
- Output Filter Included
- Single Drive or Dual Drive

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Technical characteristics

Amplifier Type:	2XFPA4U	3XFPA4U	4XFPA4U	8XFPA4U
Frequency Range [MHz]	UHF	UHF	UHF	UHF
Analog Output Power [W]	2500	3500	5000	10000
Amplification Class	AB	AB	AB	AB
Gain [dB]	18dB (±1.0dB)	18dB (±1.0dB)	18dB (±1.0dB)	18dB (±1.0dB)
Remote Control	RS485, USB	RS485, USB	RS485, USB	RS485, USB
Power Supply Voltage	3P+N 400V ±15%	3P+N 400V ±15%	3P+N 400V ±15%	3P+N 400V ±15%
Power Supply Frequency	50 - 60Hz	50 - 60Hz	50 - 60Hz	50 - 60Hz
Power Factor	> 0.98	> 0.98	> 0.98	> 0.98
Output Connector	EIA 1+5/8"	EIA 1+5/8"	EIA 1+5/8"	EIA 3+1/8"
Analog Power Consumption (Black) [kVA]	5.2 - 7.4	7.8 - 11.1	10.4 - 14.8	20.4 - 29.6
Rack	1 Rack/28U	1 Rack/42U	1 Rack/42U	2 Rack/42U
Airflow [m ³ /h]	3000	3000	3000	6000
Weight [kg]	265	400	450	900
Temperature [°C]	-5 to +45	-5 to +45	-5 to +45	-5 to +45
Amplifier Type:	1XFPA4V	2XFPA3V	2XFPA4V	4XFPA4V
Frequency Range [MHz]	VHF-III	VHF-III	VHF-III	VHF-III
Analog Output Power [W]	2000	2500	5000	10000
Amplification Class	AB	AB	AB	AB
Gain [dB]	23dB (±1.0dB)	23dB (±1.0dB)	23dB (±1.0dB)	23dB (±1.0dB)
Remote Control	RS485, USB	RS485, USB	RS485, USB	RS485, USB
Power Supply Voltage	230VAC ±15%	3P+N 400V ±15%	3P+N 400V ±15%	3P+N 400V ±15%
Power Supply Frequency	50 - 60Hz	50 - 60Hz	50 - 60Hz	50 - 60Hz
Power Factor	> 0.98	> 0.98	> 0.98	> 0.98
Output Connector	EIA 7/8"	EIA 1+5/8"	EIA 1+5/8"	EIA 3+1/8"
Analog Power Consumption (Black) [kVA]	3300	5200	10100	20200
Rack	1 Rack/20U	1 Rack/28U	1 Rack/42U	2 Rack/42U
Airflow [m ³ /h]	800	3000	3000	6000
Weight [kg]	135	265	450	830
Temperature [°C]	-5 to +45	-5 to +45	-5 to +45	-5 to +45

Specifications and characteristics are subject to change without notice