



## FPAxV

### Medium Power VHF TV Amplifiers



The new amplifiers **FAP (Digital Amplifier Technology)** series are designed to meet the highest RF performance request on the market.

Using the latest high-voltage LDMOS technologies, they achieve excellent performance in linearity, RF power and efficiency.

Designed for digital signal (DVB-T2 / ISDB-Tb / ATSC v3.0), they can be used with top class performance also with analogue standards.

Custom warnings thresholds can be set, so the operator can be called before a more serious alarm occurs (for example, when the output power decreases below a threshold).

Up to 100 events, among the most important, can be stored in a non-volatile memory for a future analysis by the operator. These events include switching on and off (by mains, by front buttons or remote control), alarms and warnings.

Thanks to a latest-generation microprocessor, the control board is implemented without any "trimmer" adjustment point.

Every control and setting is performed directly on the front panel graphical display.

A standard analogue interface and serial port are available to allow remote control of all the parameters of the unit.

The amplifiers are cooled with a powerful and noiseless blower.

#### Models

FPA1V	650W
FPA2V	1300W
FPA3V	1950W
FPA4V	2600W



Latest switching-mode power supply helps to reach extreme amplifier efficiency, accompanied with a power factor close to one in every load condition.

The units are available with different RF gain options. The standard version, with lower gain simplifies the multiple drawers paralleling operations, making easy future power upgrade. The higher gain option allows a direct digital modulator with OdBm output power level driving. In this last case a sophisticated ALC algorithm take care of the output power level, leaving it stable over temperature gain reducing and input level variation.

Output Reflected power and temperature FOLD -BACK algorithm can be front panel activated.

The amplifier are wideband RF, and available in single phase and three phase system.

#### Main characteristics

- Unsurpassed Linearity
- 50V LDMOS Technology
- Forced-air Cooling System
- Analog and Digital RF Input Signal
- High Efficiency
- Multi-platform Remote Control
- All Voltages and Currents available on display
- Controllable via USB
- Air Dust Filter

# FPAxV Medium Powers VHF Amplifiers

## Technical characteristics

Amplifier Type:	FPA1V	FPA2V	FPA3V	FPA4V
Frequency Range [MHz]	VHF	VHF	VHF	VHF
Analog Output Power [W]	650 (±0.5dB)	1300 (±0.5dB)	1950 (±0.5dB)	2600 (±0.5dB)
Digital Output Power (ATSC) [rms]	300 (±0.5dB)	600 (±0.5dB)	900 (±0.5dB)	1200 (±0.5dB)
Amplification Class	AB	AB	AB	AB
Gain [dB]	16dB (±1.0dB)	16dB (±1.0dB)	16dB (±1.0dB)	16dB (±1.0dB)
Remote Control	RS485, USB	RS485, USB	RS485, USB	RS485, USB
Power Supply Voltage (Amplifier) <sup>1</sup>	230VAC ±15	230VAC ±15%	230VAC ±15%	230VAC ±15%
Power Supply Frequency	47 - 63Hz	47 - 63Hz	47 - 63Hz	47 - 63Hz
Power Factor	> 0.98	> 0.98	> 0.98	> 0.98
Input Connector	N Female	N Female	N Female	N Female
Output Connector	7/16" Female	7/16" Female	EIA 7/8"	EIA 7/8"
Analog Power Consumption (Black) <sup>2</sup> [VA]	900	1900	2700	3900
Digital Power Consumption (ATSC) <sup>2</sup> [VA]	800	1700	2300	3300
Housing (Amplifier/Rack)	2U/20U	3U/20U	4U/20U	4U/20U
Airflow (Amplifier/Rack) [m <sup>3</sup> /h]	270/270	600/800	600/800	800
Weight (Amplifier / Rack+Amplifier) [kg]	25/110	30/130	35/140	40/140
Temperature [°C]	-5 to +45	-5 to +45	-5 to +45	-5 to +45

Specifications and characteristics are subject to change without notice

Note 1: If is it requested a blower to extract the exhausted hot air from the rack, this is available with a 230V 15% power supply voltage. Other voltage range are available on request.