

**A class Solid State  
High VSWR operation**

**Application : Radiated EMC**

Designed and manufactured in France, the AP32 TU220 power amplifier operates in a symmetric mode with high linearity capability. Solid state power modules are combined with high performance proprietary devices.

PRANA back ground into high power and broadband EMC products in last 20 years brings products to high reliability.

A high linear power is available and allows a high field output level with typical broadband antennas. PRANA EMC amplifiers are designed to withstand excessive VSWR of typical EMC field generation environment.

The AP32 TU220 amplifier is compatible with any automatic test environment thanks to additional measurement and communication features.

The up to date and modern concept of the AP32 TU220 amplifier warrants the user of a permanent internal signal levels monitoring and allows local or remote full diagnostic capability.



### Output characteristics

Nominal power	200 W
Single Instantaneous range	800 – 2000 MHz
Power at 3 dB compression (1)	140 W min. up to 1 GHz / 200 W min. up to 2 GHz
Power at 1 dB compression (1)	130 W min. up to 1 GHz / 160 W min. up to 2 GHz
Gain	60 dB typ.
Linear power gain flatness	± 3 dB typ. / ± 3.5 dB max.
Nominal output load	50 Ohms
Reflected power on load mismatch	100 % reverse power without power protection
Harmonic distortion at 1dB compression or nominal power	H2 < -20 dBc H3 < -20 dBc
Spurious	< -60 dBc
Noise figure	≤ 15 dB typ.

### Input characteristics

Input level for nominal output power	0 dBm typ.
Input impedance	50 Ohms
Input VSWR	2:1 max.
Maximum input level	+10 dBm

### External interface

RF Input connector (2)	Type N fem.
RF output connector (2)	Type N fem.
Incident and reflected RF power sampling connector (3)	Type N fem. (Option 001)
Safety interlock	Yes
Communication IEEE 488 GPIB	Yes
Digital display	Yes
LED control indicator	Fault, Controller Ok
Forward and direct power display	Yes (Option 003)
Manual controls	Power On/Off – menu key functions

### Environment and Protections

Ambient temperature range in operation	0°C / +35°C
Storage ambient temperature range	-20°C / +70°C
Cooling	Air, 120 l/sec
Protections	Infinite VSWR, Temperature, Power Supply, Bias Voltage
EMC	certified

### Electrical characteristics

Supply voltage (4)	90-250 VAC, 47-63Hz, Single phase
Nominal current	12.8 A at 110 VAC – 6.1 A at 230 VAC
Power in	< 1400 VA

### Mechanical outline

Packaging	19" Rack
High (standard)	267 mm (6U)
Width	450 mm
Depth	630 mm
Weight	65 kg

- (1) Without Option 001 (Internal coupler).  
 (2) Rear panel standard.  
 (3) Front panel only

### Power graph

