

**A class Solid State  
High VSWR operation**

**Application : Radiated EMC**

Designed and manufactured in Europe, the AP32 NT275 power amplifier operates in a symmetric mode with high linearity capability.

Solid state power modules are combined with high performance proprietary devices.

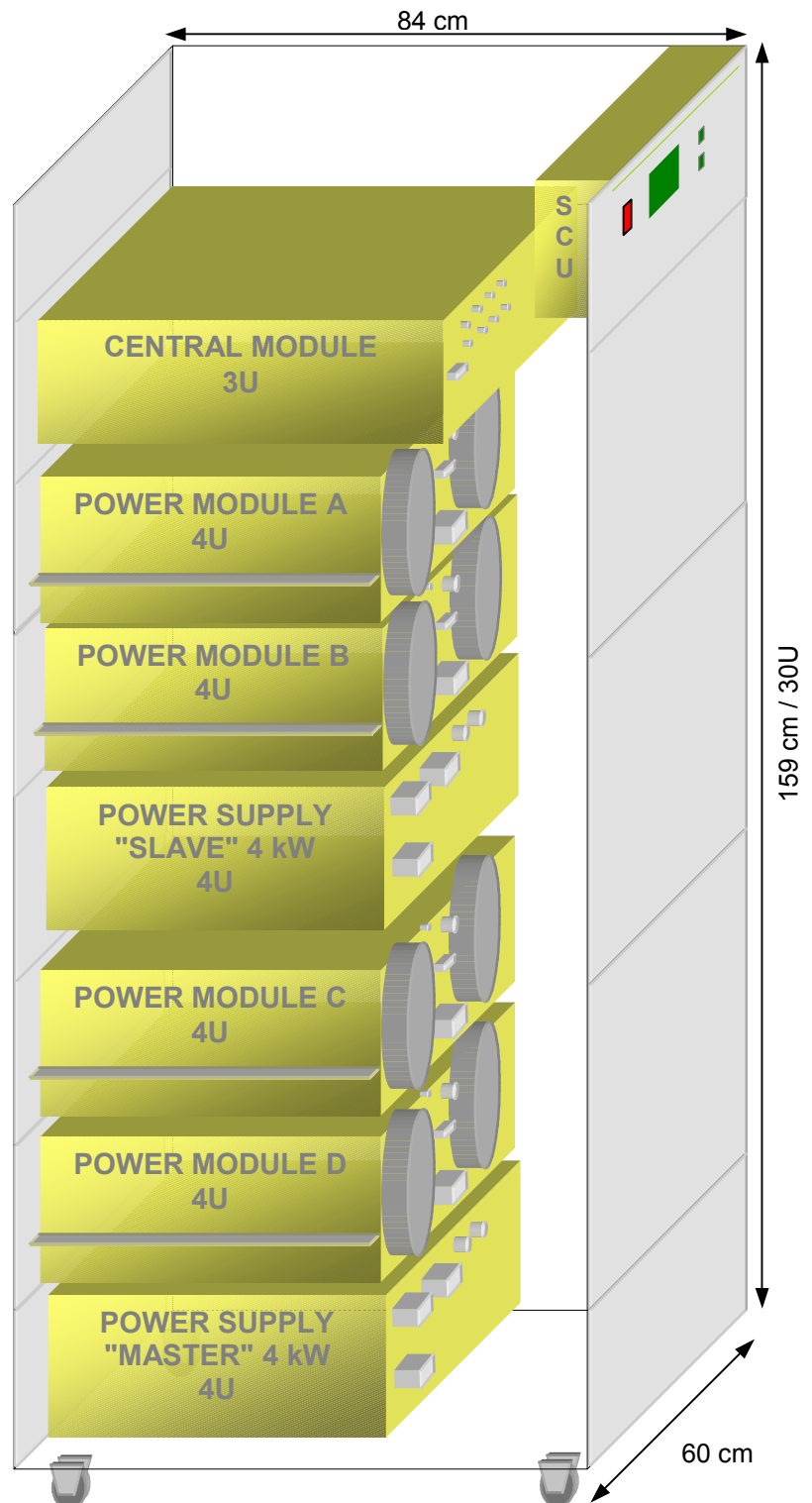
PRANA back ground into high power and broadband EMC products in last 10 years brings products to high reliability.

A high linear power is available at low frequencies 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 NT275 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 NT275 amplifier warrants the user of a permanent internal signal levels monitoring and allows local or remote full diagnostic capability.





## AP32 NT275 POWER AMPLIFIER 750W CW 200MHz - 1GHz

### Output characteristics

Nominal power	750 W
Single Instantaneous range	200 – 1000MHz
Power at 3 dB compression	1000 W min. up to 650MHz / 850W min. up to 1GHz
Power at 1 dB compression max.	800 W min. up to 650MHz / 600W min. up to 1GHz
Gain	59 dB typ., 56 dB min.
Linear power gain flatness	± 2 dB typ., ± 3 dB max.
Nominal output load	50 Ohms
Reflected Power on load mismatch	700 W reverse power without power reduction feed back loop
Harmonic distortion at 1dB compression	H2 <-25 dBc, -30 dBc typ. H3 <-20 dBc, -25 dBc typ.
Spurious	< -60 dBc
Noise figure	< 20 dB typ., 25 dB max.

### Input characteristics

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

### External interface

RF Input connector (1) (2)	Coaxial N fem.
RF output connector (1) (2)	Coaxial C fem.
Incident power sample connector (2) (3)	Coaxial N fem. (Option 001)
Reflected RF power sample connector (2) (3)	Coaxial N fem. (Option 001)
Communication IEEE 488 GPIB	Option 002
Digital display	Yes
LED control indicator	Fault, Controller Ok
Forward and direct power display	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, 480 l/sec
Protections	Infinite VSWR, Temperature, Power Supply, Bias Voltage

### Electrical characteristics

Supply voltage (4)	230/400 VAC, +/- 10% 50-60Hz 3 phases
Nominal current	< 12 A phase 1 and 2 ; < 24 A phase 3
Power in	< 11 kVA

### Mechanical outline

Packaging	19" cabinet on wheels
High ( standard)	1,59 m (30U)
Width	600 mm
Depth	840 mm
Weight	380 kg

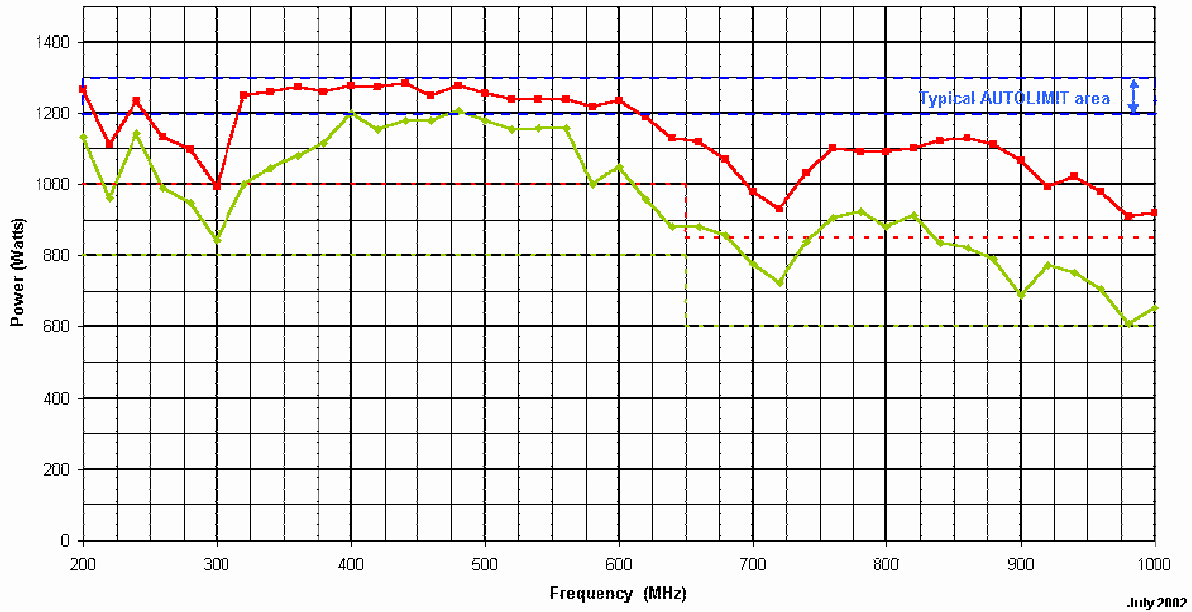
- (1) Rear panel standard.
- (2) Other type on request.
- (3) Rear panel only.
- (4) 3 phases + Neutral + Protective ground.

### Power graph



AP32 NT275 POWER AMPLIFIER - 200MHz - 1000MHz - Typical Power

— 1dB compression typical — 3 dB compression typical - - - 1dB comp. ref. line - - - 3dB comp. ref. line



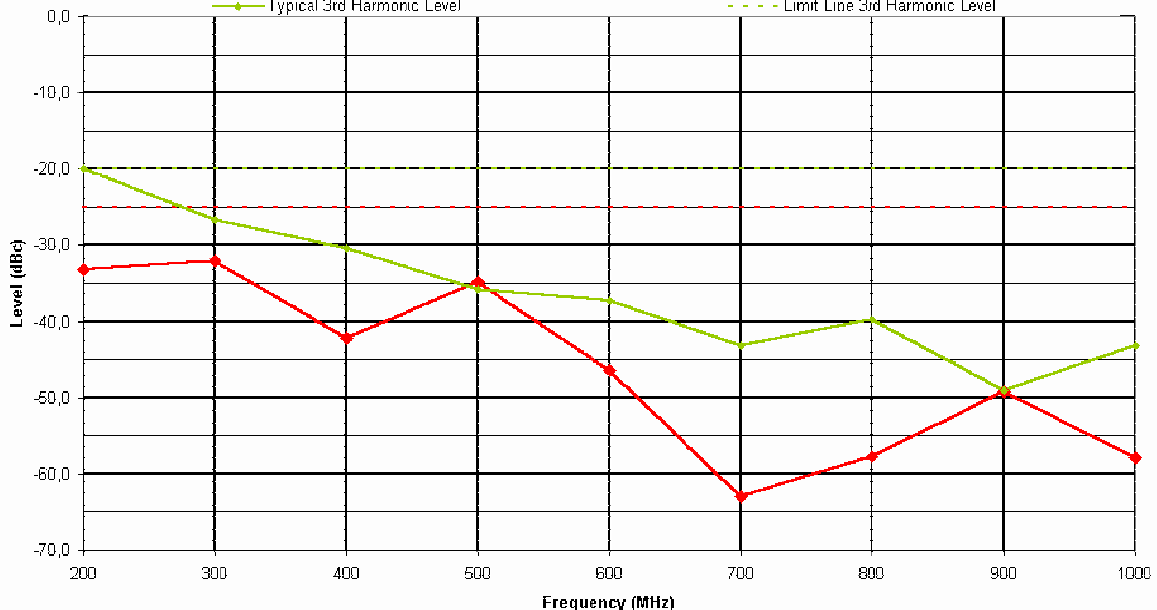
July 2002

### Harmonics Level graph



AP32 NT275 POWER AMPLIFIER - 200MHz - 1000MHz  
Typical Harmonics Level (at 1 dB compression)

— Typical 2nd Harmonic Level — Typical 3rd Harmonic Level - - - Limit Line 2nd Harmonic Level - - - Limit Line 3rd Harmonic Level



July 2002