

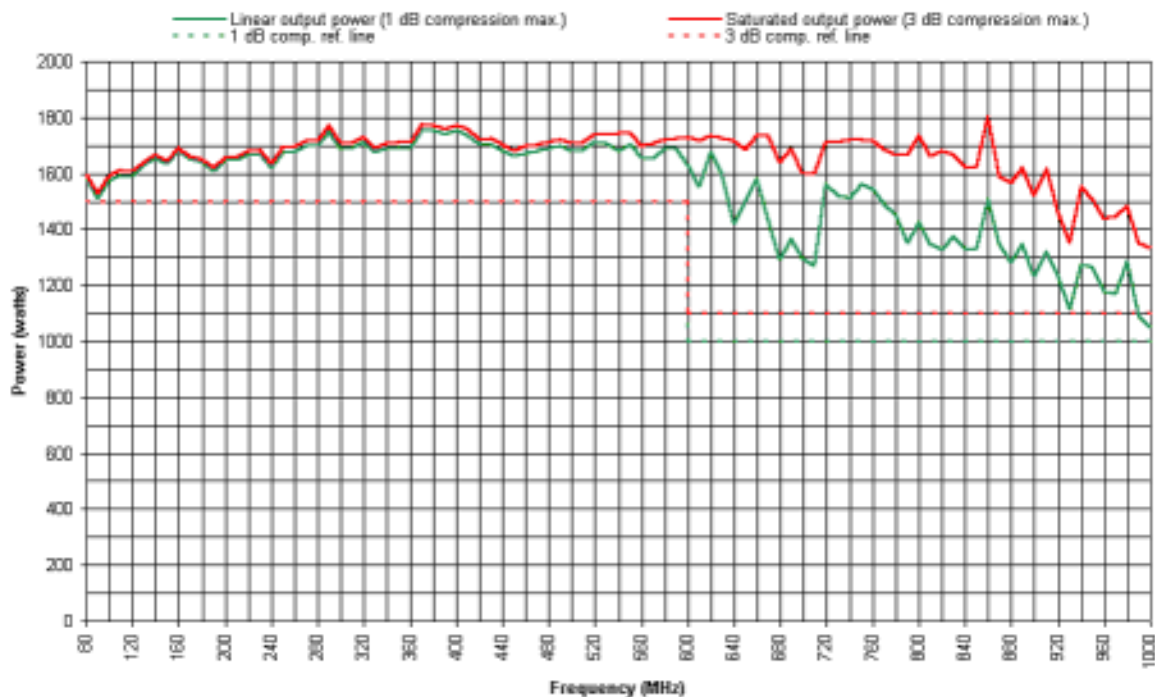
A class Solid State
High VSWR operation

Application : Radiated EMC



The AP32 MT315 power amplifier operates in a symmetric mode with high linearity capability. Solid state power modules are combined with high performance proprietary devices. 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 MT315 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 MT315 amplifier warrants the user of a permanent internal signal levels monitoring and allows local or remote full diagnostic capability.

AP32 MT315 POWER AMPLIFIER - 80MHz - 1000MHz - Typical Power



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Output characteristics

Nominal power	1500 W
Single Instantaneous range	80 – 1000 MHz
Power at 3 dB compression	1500 W min. up to 600 MHz / 1100 W min. up to 1 GHz
Power at 1 dB compression max.	1500 W min. up to 600 MHz / 1000 W min. up to 1 GHz
Gain	60 dB typ., 56 dB min.
Linear power gain flatness	± 3 dB typ., ± 3.5 dB max.
Nominal output load	50 Ohms
Reflected power on load mismatch	750 W reverse power without power reduction feed back loop
Harmonic distortion at 1dB compression or nominal power	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	+10 dBm

External interface

RF input connector (1)	Coaxial N fem.
RF output connector (1)	Coaxial 7/16 fem.
Incident power sample connector (2)	Coaxial N fem.
Reflected RF power sample connector (2)	Coaxial N fem.
Interlock	Yes
Communication IEEE 488 GPIB	Yes
Digital display	Yes
LED control indicator	Fault, Controller Ok
Forward and direct power display	Yes
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, 960 l/sec
Protections	Infinite VSWR, Temperature, Power Supply, Bias Voltage
EMC	 certified

Electrical characteristics

Supply voltage (3)	230/400 VAC, +/- 10% 50-60Hz 3 phases
Nominal current	< 36 A phase 1 and 2 ; < 24 A phase 3
Power in	< 21 KVA

Mechanical outline

Packaging	22" cabinet on wheels
High (standard)	1,940 m (38U)
Width	600 mm
Depth	840 mm
Weight	650 kg

- (1) Rear panel standard.
 (2) Rear panel standard.
 (3) 3 phases + Neutral + Protective ground.