

A class Solid State
High VSWR operation

Application : Radiated EMC



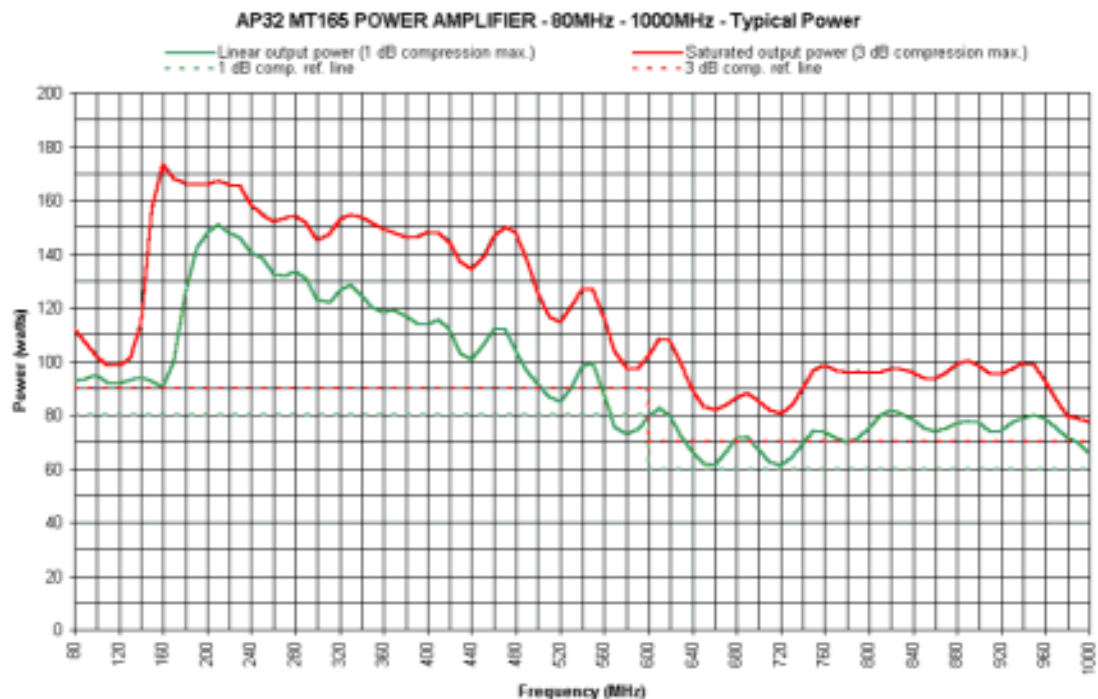
The AP32 MT165 power amplifier operates in a symmetric mode with high linearity capability. Solid state power modules are combined with high performance proprietary devices.

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 MT165 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 MT165 amplifier warrants the user of a permanent internal signal levels monitoring and allows local or remote full diagnostic capability.



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Output characteristics

Nominal power	65 W
Single Instantaneous range	80 – 1000 MHz
Power at 3 dB compression (1)	90 W min. up to 600 MHz / 70 W min. up to 1 GHz
Power at 1 dB compression max. (1)	80 W min. up to 600 MHz / 60 W min. up to 1 GHz
Gain	48 dB typ., 45 dB min.
Linear power gain flatness	± 2 dB typ., ± 3 dB max.
Nominal output load	50 Ohms
Reflected power on load mismatch	65 W reverse power without power protection
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 (2)	Coaxial N fem.
RF output connector (2)	Coaxial N fem.
Incident power sample connector (3)	Coaxial N fem. (Option 001)
Reflected RF power sample connector (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, 60 l/sec
Protections	Infinite VSWR, Temperature, Power Supply, Bias Voltage
EMC	CE certified

Electrical characteristics

Supply voltage (4)	90 -250 VAC, 47-63Hz
Nominal current	6,9 A at 100 V - 3 A at 230 V
Power in	< 700 VA

Mechanical outline

Packaging	19" Rack
High (standard)	178 mm (4U)
Width	450 mm
Depth	630 mm
Weight	32 kg

- (1) Without internal coupler (Option 001).
- (2) Front panel standard / Rear panel on request.
- (3) Rear panel standard / Front panel on request.
- (4) Other voltage or frequency on request.