PA6002 Wideband RF Linear Power Amplifier

P. M POWER AMPLIFIER PA6002

Main Features

- Meets civilian and military standards (e.g. IEC/EN 61000-4-3; IEC/EN 61000-4-6; ISO 11452-4; MIL-STD-461G; etc.)
- Suitable for conducted, radiated and automotive immunity tests
- 9 kHz to 230 MHz frequency range
- 10 W power output (15 W from 150 kHz to 80 MHz)
- 40 dB power gain
- Class A linear solid-state amplifier
- 50 Ω input/output impedance
- Analog meter and LED indicators
- Fan air cooling
- Robust and compact construction

The PA6002 Wideband RF Linear Power Amplifier is highly reliable and suitable for all applications where its output power of 10 watts (15 watts) and wide frequency range (9 kHz to 230 MHz) suit the needs of the test engineer. Able to withstand even high VSWR, the PA6002 is a perfect companion in any radiated and conducted measurement chain: on the product designer's workbench, in the EMC test laboratory, for in-situ testing, etc.

The PA6002 Class A Linear Solid-State Amplifier features a compact and rugged construction, and its MOSFET technology provides high gain, low distortion, consistent performance and high reliability all across the wide frequency band. An analog meter makes it possible to monitor output signal amplitude at a glance, and an alarm LED provides a useful indication when current or temperature levels are outside specifications.

The power amplifier can be used with any EMI signal generator, power sensor, CND, EM clamp, current injections clamp and directional coupler for all conducted and radiated, civilian, military and automotive measurements.

The complimentary PMM Immunity Suite software delivered with the PA6002 can be used on any PC to automatically perform simple yet complete and effective tests, as it manages all the measurement settings and functions required by the chosen immunity standard.



PA6002

Wideband RF Linear Power Amplifier

SPECIFICATIONS

Frequency range	9 kHz to 230 MHz
Power output CW	10 W; 15 W from 150 kHz to 80 MHz
Power gain	40 dB
Gain flatness	+1 dB -1,5 dB
Drive level	0 dBm (1 mW) for 10 W output
Input return loss	< 20 dB
Harmonic distortion	< -20 dBc
RF input	Zin 50 Ω , BNC female
RF output	Zin 50 Ω , N female
Power indication	Analog meter, 20 W f.s.
LED indicators	Power/current limiter and temperature alarm
Power supply	85 to 264 Vac 47 to 440 Hz / 120 to 370 Vdc 60W
Operating temperature	0 °C to +40 °C
Operating humidity	0 to 90% RH (without condensation)
Storage temperature	-40 °C to +70 °C
Dimensions (W x H x D)	235 x 105 x 300 mm
Weight	4,5 kg

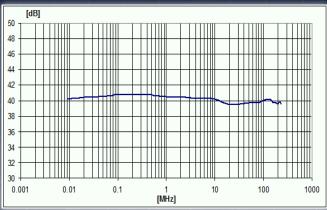
Ordering information:

PA6002 Wideband RF Linear Power Amplifier Includes: Power supply cable, BNC-BNC cable, N-m to BNC-f adapter, user's manual, standard calibration certificate

Optional accessories:

3010 EMI Signal Generator 9 kHz to 1 GHz 3030-01 EMI Signal Generator 9 kHz to 3 GHz, AC supply 3030-02 EMI Signal Generator 9 kHz to 3 GHz, AC supply, internal rechargeable battery 6630 USB RF Power Sensor 9 kHz to 3 GHz 6630 FOA Fiber Opic Adapter EP-600 Field probe 100 kHz to 9,25 GHz 0,14 to 140 V/m EP-601 Field probe 10 kHz to 9,25 GHz 0,5 to 500 V/m EP-602 Field probe 5 kHz to 9,25 GHz 1,5 to 1500 V/m EP-603 Field probe 300 kHz to 18 GHz 0,17 to 170 V/m EP-604 Field probe 300 kHz to 26,5 GHz 0,4 to 800 V/m **OR03** Optical Programmable Repeater and its probes SB-10 Switching control box EM Clamps, Current injections clamps, Directional couplers, CDN for mains, Unshielded/

Unbalanced lines CDNs, Shielded lines CDNs, Balanced lines CDNs, 6 dB attenuators, CDN calibration kit and accessories; for full list and configurations please refer to COND-IS and RAD-IS system documentation



Typical gain @ nominal power (dB)

Related products and services

Generators/Receivers/Systems

- 1008: Magnetic field generator system
- 7010/00: EMI Receiver 150 kHz to 1 GHz
- 7010/01: EMI Receiver 9 kHz to 1 GHz
- 7010/02: EMI Receiver 9 kHz to 30 MHz
- 7010/03: EMI Receiver 9 kHz to 3 GHz
- 9010: EMI Receiver 10 Hz to 30 MHz
- 9010F: EMI Receiver 10 Hz to 30 MHz
- 9010/03P: EMI Receiver 10 Hz to 300 MHz
- 9010/30P: EMI Receiver 10 Hz to 3 GHz 9010/60P: EMI Receiver 10 Hz to 6 GHz
- 9030: EMI Receiver 30 MHz to 3 GHz
- 9060: EMI Receiver 30 MHz to 6 GHz
- 9180: EMI Receiver 6 GHz to 18 GHz
- FR4003: Field Receiver 9 KHz to 30 MHz
- COND-IS: RF Conducted Immunity System
- RAD-IS: RF Radiated Immunity System
- AUT-IS: Automotive Immunity System

Antennas/Calibration services

- BC-01: Biconical Antenna 30 to 200 MHz
- DR-01: Double-ridged horn Antenna 6 to 18 GHz

- LP-04: Log Periodic Antenna 200 MHz to 6 GHz

- Antenna Set AS-04 (BC01+LP04+TR01)
- Antenna Set AS-05 (BC01+LP04+DR01+TR01)
- RA-01: Rod Antenna 9 kHz to 30 MHz
- RA-01-HV: Rod Antenna 150 kHz to 30 MHz
- RA-01-MIL: Rod Antenna 9 kHz to 30 MHz
- Ansi 63,5 Antenna Factor
- SAE ARP 958-D
- Free-Space Antenna Factor
- CAL-6630: Traceable calibration
- LAT-6630: Accredited calibration





an [3 Communications Company

LISNs/Probes

[MHz]

0.1

- · L2-16B: single phase AMN, 16 A
- L3-32: 4 lines, 3-phase AMN, 32 A • L3-64: 4 lines, 3-phase AMN, 63 A
- L3-64/690V: 4 lines, 3-phase AMN, 63 A

100

1000

10

- L3-100: 4 lines, 3-phase AMN, 100 A
- L1-150M: single-path, 50 Ohm AMN, 150 A
- · L1-150M1: single-path, 50 Ohm AMN, 150 A
- L1-500: single phase AMN, 500 A
- L3-500: 4 lines, 3-phase AMN, 500 A
- L2-D: Delta LISN for telecom, 2 A, 150 Ω
- RF-300: Van Veen Loop
- SBRF4: RF Switching Box
- SHC-1/1000: Voltage probe, 1000 Vac, 35 dB
- SHC-2/1000: Voltage probe, 1000 Vac, 30 dB

PA6002-FEN-70501 - Specifications subject to change without notice

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0.001 0.01 Power output @ 1 dBc (W)

IWI

20.0

18.0

16.0

14.0

12.0

10 0

80

6.0

4.0

2.0

0.0

- LP-02: Log Periodic Antenna 200 MHz to 3 GHz
- LP-03: Log Periodic Antenna 800 MHz to 6 GHz
- TR-01: 60-180 cm wooden extendable tripod
- VDH-01: Van der Hoofden Test Head 20 kHz to 10 MHz
- Antenna Set AS-02 (BC01+LP02+TR01)
- Antenna Set AS-03 (BC01+LP02+LP03+TR01)