

# 6000N

## Wideband RF Linear Power Amplifier



### 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  $\Omega$  input/output impedance
- Analog meter and LED indicators
- Fan air cooling
- Robust and compact construction

The 6000N 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 6000N 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 6000N 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 6000N 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.

# 6000N

## 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 - 264 Vac or 120 - 370 Vdc, 47 - 440 Hz, 60 W
Operating temperature	+10 °C to +40 °C
Operating humidity	0 to 90% RH (without condensation)
Storage temperature	-40 °C to +50 °C
Dimensions (W x H x D)	257 x 115 x 316 mm
Weight	4,5 kg

### Ordering information:

**6000N** 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 Optic 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

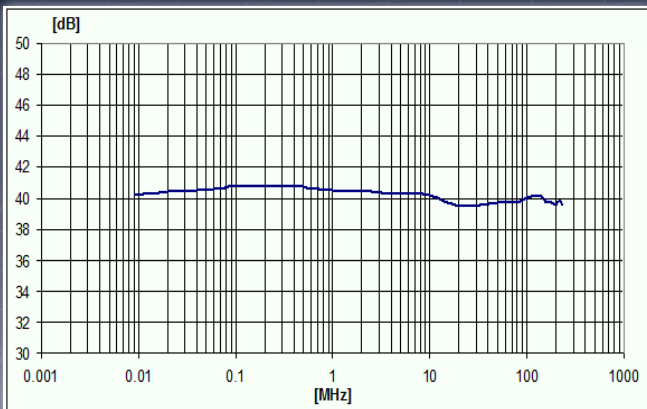
**EP-603** Field probe 300 kHz to 18 GHz 0,17 to 170 V/m

**EP-604** Field probe 300 kHz to 26,5 GHz 0,4 to 800 V/m

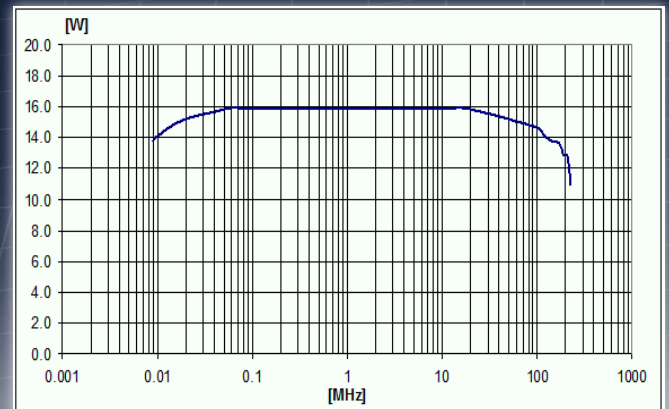
**OR03** Optical Programmable Repeater and its probes

**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)



Power output @ 1 dBc (W)

## 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-02: Log Periodic Antenna 200 MHz to 3 GHz
- LP-03: Log Periodic Antenna 800 MHz to 6 GHz
- LP-04: Log Periodic Antenna 200 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)
- 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

### LISNs/Probes

- 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
- 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



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