



Description

The PSG-300 contains a linear precision power amplifier with a wide bandwidth (DC-300 kHz), suitable for all applications concerning fast alternating signals at high output power. The built in generator provides sine, square and triangle waves. Communication between PSG-300 and PC is via USB connection. The application software is suited for general power generator applications and for immunity tests according to IEC/EN 61000-4-16 as well as to IEC/EN 61543. Short term tests are enabled by phase controlled switching of an external power source (optional). The PSG-300 is equipped with a silent, temperature-controlled fan. Internal safeguards protect the amplifier from overheating and high power dissipation. They also assure protection against short-circuits and overload.

Features:

- Short circuit and overload protection
- Completely linear and low noise design
- Outstanding DC stability
- Over temperature switch off
- Protection / Ready LED
- EUT-fail input
- EUT-monitor input

The number one choice for all applications with the need for fast and powerful signals, e.g.:

- Simulation of DC / AC supply lines
- Generation of magnetic fields with Helmholtz or similar coils
- Control of piezo actors
- Immunity testing according to IEC/EN 61000-4-16, IEC/EN 61000-4-19 AND IEC/EN 61543
- Calibration devices etc.

Technical specifications	PSG-300	PSG-300A
Amplifier		
Frequency range	DC – 1 MHz (small signal –3 dB)	
Power bandwidth	DC – 200 kHz	
Slew rate	100 V/μs	
Offset	±1 mV (±0.1 mV/°C)	
Gain	10 ±0.1 % (±0.01 %/°C)	
Output voltage	50 V _{eff} / ±75 V _{peak}	
Output current	5 A _{eff} / ±7.5 A _{peak}	16 A _{eff} / ±23 A _{peak}
Power output	250 W	800 W
Distortion (DC – 100 kHz, load ≥ 4 Ω)	< 0.10%	
Input impedance	100 kΩ	
Max. input voltage	80 V (cont.), 100 V (< 1 min)	
Noise (10 Hz – 1 MHz, input: 50 Ω)	0.5 mV _{eff}	
Output connector	4 mm MC	
Output connector 50 Ω	BNC	
Generator		
Frequency range	DC, 0.05 Hz – 300 kHz	
Frequency resolution	0.05 Hz	
Frequency accuracy	± 20 ppm	
Waveform	Sine, square, triangle	
External generator input	BNC	
General data		
Remote control	USB connector	
Dimension (LxWxD)	448,9x132.55x435.50mm	448.90 x 177 x 585.50 mm
Weight	approx. 14 kg	approx. 30 kg

Options:

PSG-E300 External power source for short term test 300V@DC,162/3Hz,50Hz,60Hz

PSG-EXT Input connector for phase controlled switching of external power source