



RSG 3000 REFERENCE SPECTRUM GENERATOR 1 MHz - 6 GHz



RSG 3000

- Comb generator 1 MHz to 6 GHz (typically 7 GHz)
- Switchable spectrum with 1, 5 or 10 MHz
- High stability for frequency and level
- Changeable accumulator set
- Earth free operation

The RSG 3000 is a reference spectrum generator for the frequency range from 1 MHz to 6 GHz. It consists of a battery operated comb generator with a high stable temperature compensated crystal oscillator (TCXO). A frequency spectrum can be selected with a line spacing of 1 MHz, 5 MHz or 10 MHz. Combined with an antenna the generator represents a precise radiation source.

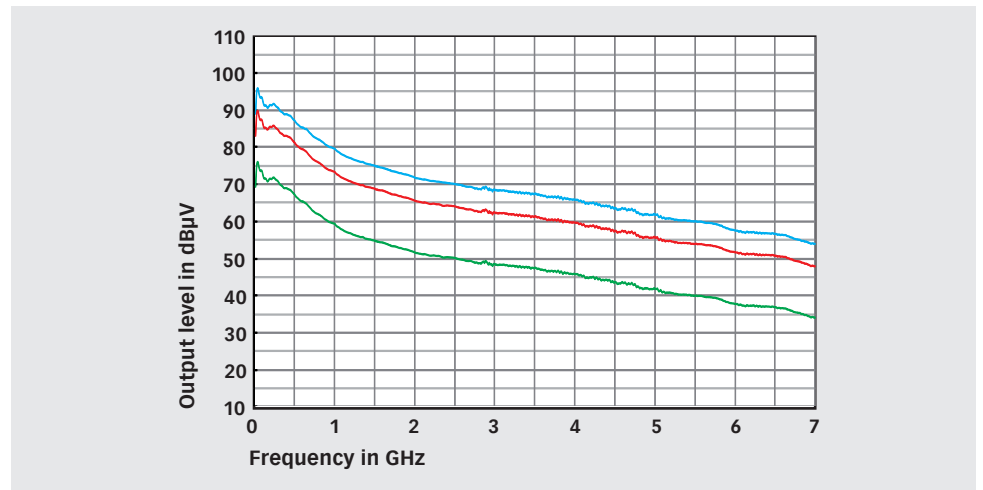
Comparison measurements

The RSG 3000 is suitable for various comparison measurements. It provides a 50 Ω reference for comparing different test sites (e.g. OATS, anechoic chambers and GTEM cells) and set-ups. It may be used for the verification purpose as well as for quick checks of antennas, networks and test set-ups.

Attenuation measurement

A simple method, using the RSG 3000, allows the measurement of the attenuation of coaxial cables or attenuators without using a network analyzer. With its high level stability, the generator is suitable for the fast calibration of measuring receivers level accuracy.

RSG 3000, typical output level at 50 Ω, — 10 MHz, — 5 MHz and — 1 MHz

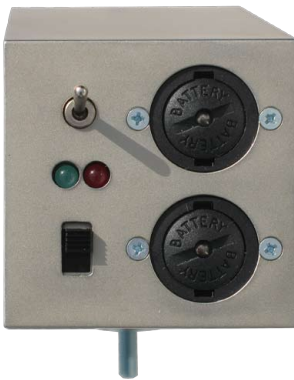




RSG 3000 REFERENCE SPECTRUM GENERATOR 1 MHz - 6 GHz



RSG 3000, view to the N connector



RSG 3000, view to the on/off switch, battery slots, comb spacing switch and LEDs

Technical specifications of RSG 3000

Frequency range:	1 MHz – 6 GHz
Comb spacing:	10 MHz, 5 MHz, 1 MHz
Frequency stability (TCXO, 10 MHz):	< 1 ppm (0°C to +50°C)
Aging:	< 1 ppm / year
Frequency correction (internal):	< 5 ppm
Signal stability:	< ±0.3 dB (20°C const.) < ±0.5 dB (+5°C to +40°C)
Output level, 50 Ω, typical (10 MHz spacing):	90 dBμV @ 10 MHz, 60 dBμV @ 6 GHz
Connector (RF- output):	N, female, 50 Ohm
Power supply (rechargeable batteries, changeable):	4 x 1.2 V, NiMH, Mignon, type AA, condition controlled, LowBat- LED, automatic switch-off, working time approx. 16 h with 2100 mAh
Watch dog for batteries:	at approx. 4.8 V warning with red LED at approx. 4.6 V green LED turns off
Automatic turn off:	at approx. 4.3 V approx. 1h after visual warning of discharging (red LED)
Operating temperature:	+5° C to +40° C
Storage and transport temperature (with batteries):	-20° C to +35° C
(without batteries):	-40° C to +70° C
Class of protection:	IP X0
Relative humidity:	0% to 80% without condensation
Condensation:	Not permissible during use
Altitude:	< 2000 m above sea level
Storage and transport:	< 12000 m above sea level
Dimensions (W x H x D) in mm:	60 x 60 x 175
Weight:	approx. 580 g

Model No. and options

Part number	Description
244550	RSG 3000 Reference generator 1 MHz - 6 GHz
97-244550	RSG 3000-TC Traceable calibration (ISO 17025) of RSG 3000, order only with the device

Teseq GmbH
Landsberger Str. 255 · 12623 Berlin · Germany
T +49 30 56 59 88 35 F +49 30 56 59 88 34
desales@teseq.com www.teseq.com