

GR-104 / GR-205



SPECIFICATIONS	GR-205 2 GHz RF GENERATOR
PM Modulation Peak Deviation Setting Resolution Signal Modulation Distortion	From 0.05 to 10-80 radians depending on freq. 0.05 or 0.1 radians Internal 400 Hz and 1 kHz or external 100 Hz to 10 kHz < 2% modulation freq. at 1 kHz and max. deviation
AM Modulation Depth max. modulation Setting Resolution Accuracy External Modulation Distortion	100 %, decreasing up to 90 % @ 2 GHz 0.5 %. < ± (5% selected value + 1%) for 1 kHz modulation and < 70 % depth 50 Hz to 200 kHz (± 1 dB relative to 1 kHz) < 3% (< 1 GHz) 30 % depth

SPECIFICATIONS	GR-104 1 GHz RF GENERATOR	GR-205 2 GHz RF GENERATOR
General		
Frequency Range	10 MHz to 1000 MHz	150 kHz to 2000 MHz
Resolution	1 kHz or user-set increments	10 Hz or user-set increments
Accuracy	< ± 1 ppm over temp. range 15 °C to 30 °C, < ± 2 ppm over temp. range 5 °C to 40 °C	
Stability		< 1 ppm/year
Phase Noise	< -110 dBc/Hz at 25 kHz offset, 500 MHz carrier	< -116 dBc/Hz at 25 kHz offset, 500 MHz carrier
Residual FM	Equivalent peak derivation in a 300 Hz to 3.4 kHz bandwidth: 17 Hz at 500 MHz carrier	Equivalent peak derivation in a 300 Hz to 3.4 kHz bandwidth: 12 Hz at 500 MHz carrier
Output level		
Legal Range	-127 dBm to +7 dBm (0.1µV to 500 mV with 50Ω impedance); In GR-205 up to +1 dB in AM mode	
Setting resolution	0.1 dB (0.01 µV to 1 mV) or user-set increments of 0.1 dB to 100 dB	
Accuracy	Better than ± 2dBm (GR-104 from 500 MHz to 1 GHz <-70 Bm ± 3 dBm)	
Harmonics	Typically <-25 dBc max. - 20 dBc, output level <0 dBm	<-25 dBc to +7 dBm
Output Impedance		50 Ω
Output Switch		RF OUT on-off switch with LED showing ON status
FM Modulation		
Peak Deviation	0.5 kHz to 100kHz	0.5 kHz to 100 - 800 kHz depending on freq.
Setting Resolution	0.5 kHz	
Modulation Frequency	Internal 1kHz, External 300 Hz to 50 kHz	Internal 400 Hz and 1 kHz, External 100 Hz to 300 kHz
Deviation Accuracy		<±10% of setting
External Modulation	± 1 dB from 30Hz to 50 kHz relative to 1kHz	± 2 dB relative to 1 kHz
Frequency Response		<2% total harmonic distortion at 1kHz modulating frequency, and max. deviation
Distortion		
Remote Control Interfaces	RS-232 (standard) and IEE-488 (GPIB) (optional)	RS-232 and IEE-488 (GPIB)
Display		80 character back-lit LCD display
Power Supply		240-220 V, 120-110 V, 100 V adjustable internally Máximo 30 VA
Operating		
Environmental Conditions		
Temperature range		From 5 to 40 °C
Max. Relative humidity		80 % max. (without condensation)
Altitude		Up to 2000 m max
Storage Temperature		Indoor use, Category II, Pollution degree 2
		From -20 °C to 60 °C
Mechanical Features		
Dimensions		W. 212 x H.130 x D. 330 mm
Weight	4.6 kg	5 kg

