

Instek Spectrum Analyzer

Part No. 01GSP810

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FEATURES

- Frequency Range : 150kHz ~ 1000MHz
- Fully Digital Phase Locked Loop Technique Design
- High Frequency Stability : ± 10 ppm
- High Resolution of Span to Measure the more detailed signal : Zero, 2kHz ~ 100MHz /DIV
- RBW : 3k, 30k, 220k, 4M
- High Input Protection Level : +30dBm, ± 25 VDC
- Reference Level Range : -30dBm ~ +20dBm
- Good Noise Floor Performance : -95dBm @30kHz, -100dBm typical ; over -150dBm/Hz typical @220kHz and 4MHz RBW
- Spurious Noise : < -60dB
- Inter-modulation (3rd) : < -70dBc
- Two Markers for Absolute and Relative Measurement
- Functions : Max. Hold, Average (2 ~ 32 traces), Freeze, Peak Search, Marker to Center Function
- 9 Memories of Save/Recall
- RS-232 Interface and Display Software to get Trace from GSP-810 to PC
- Options: Power Meter, Tracking Generator, Remote Control Software

SPECIFICATIONS

FREQUENCY

Frequency Range	150kHz ~ 1000MHz
Frequency Resolution	1kHz C.F. entry, 40Hz Sweep resolution at 2kHz/DIV
Frequency Display	6 1/2 digit setting
Frequency Control	Digital phase locked
Frequency Stability	± 2 ppm/year aging, ± 10 ppm, 0 to 50°C
Frequency Spans	Zero, 2kHz to 100MHz/DIV, in a 1-2-5 sequence

BANDWIDTH

Resolution Bandwidths	3kHz, 30kHz, 220kHz, 4MHz
Resolution BW Accuracy	15%
Video Bandwidth	1.6kHz/90kHz coupled with RBW

AMPLITUDE

Reference Level Range	-30dBm to +20dBm
Reference Level Accuracy	± 1 dB at 80MHz
Input Level Range	-100dBm to +20dBm
Noise Floor	-95dBm@30kHz RBW, -100dBm typical/-75dBm:150kHz ~ 10MHz
Amplitude Display Range	75dB
Amplitude Accuracy	± 1.5 dB typical@0dBm, 80MHz
Amplitude Level Linearity	± 1.5 dB over 70dB
Ref. Level Freq. Flatness	± 1.5 dB over 100MHz, ± 2.5 dB typical over entire band/ ± 3 dB:150kHz ~ 10MHz
Harmonic Spur Response	<-40dBc, RF input < selected reference
Non-Harmonic Spur Response	<-60dBc typical down from reference level, average, 5MHz/div

Intermodulation(3rd)	<-70dBc, @-40dBm input, 2 tones, 2MHz apart/<-45dBc:150kHz ~10MHz
Phase Noise	-77dBc/Hz at 1GHz, 30kHz offset
INPUT	
Input Overload Protection	+30dBm continuous, ±25VDC
Impedance	50 ohm nominal
Return Loss	<16 dBRL (VSWR < 1.35)
Input Attenuation	50dB to 0dB in 10 dB steps coupled to reference level
Connector	Type N female
MARKER	
Number of Markers	2
Marker Resolution	0.1dB, 1kHz
Marker Mode	Absolute, Relative, PK -> Marker, Marker -> Center
Marker Accuracy	0.1dB±amplitude accuracy
FUNCTIONS	
Memory	9 memories of save/recall
Trace	Max. Hold, Average(2 ~ 32 traces), Freeze (Hold)
Setup	Access parameters
FM/AM DEMODULATOR	
WB FM	120kHz deviation
MB FM	75kHz deviation
NB FM	30kHz deviation
AM Outputs	Internal speaker, 3.5mm stereo jack, wired for mono operation
GENERAL	
Power Source	100/120/220/230V AC±10%, 50/60Hz
Accessory	Operation manual x 1
Dimensions and Weight	310(W) x 150(H) x 455(D)mm, approx. 8.5kg
TRACKING GENERATOR (OPTION 01)	
Frequency Range	10MHz to 1000MHz
Amplitude Range	0 to -50dBm
Amplitude Resolution	1dB
Amplitude Accuracy	±1dB@0dBm, 80MHz
Attenuation Accuracy	±1dB@, 50MHz
Amplitude Flatness	±1dB@, 10MHz/DIV, ±1.5dB@0dB,entire band
Harmonics	<-30dBc
Reverse Power	<+30dBm
Impedance	50 ohm nominal
Return Loss	<10 dBRL (VSWR<2)
Connector	Type N female
POWER METER (OPTION 02)	
Frequency Range	10MHz to 2GHz, usable to 2.7GHz
Power Level Range	-20dBm to +23dBm, usable to +30dBm
Power Level Overload	+40dBm<10% duty cycle, <10mS duration
Return Loss	<1:1.35 VSWR into 50 ohms, <1:1.25 typical
Readout Resolution	0.2mW, 100mW scale, 2µW, 1mW scale; 0.1dB, Log scale
Accuracy	±(10% rdg ±1digit)