Spectrum Analyzer

FEATURES

* Frequency Range : 150kHz ~ 1GHz
* Fully Digital Phase Locked Loop Technique Design
* High Frequency Stability : ±10ppm
* High Resolution of Span to Measure the More Detailed Signal : Zero, 2kHz~100MHz/div
* RBW : 3k, 30k, 220k, 4MHz
* High Input Protection Level : +30dBm, ±25VDC
* Reference Level Range : -30dBm ~ +20dBm
* Good Noise Floor Performance: -95dBm @30kHz, -100dBm Typical @220kHz RBW
* Two Markers for Absolute and Relative Measurement
* Functions: Max. Hold, Average(2 ~ 32 Traces),Freeze, Peak Search, Marker to Center Functions
* 9 Memories of Save/Recall
* RS-232C Interface and Software to get Trace from GSP-810 to PC
* Options:Tracking Generator, Power Meter, Romote Control Software

GSP-810 (150kHz~1GHz)

SPECIFICATIONS

FREQUENCY	
Frequency Range	150kHz~1GHz
Aging Rate	±10ppm, 0~50° C, ±2ppm/yr
Span Range	Zero, 2kHz~100MHz/div in 1-2-5 sequence
Phase Noise	-77dBc/Hz @ 1GHz 30kHz offset
Frequency Resolution	1kHz C.F. entry, 40Hz sweep resolution at 2kHz/div
Frequency Display	6 1/2 digit setting
Frequency Control	Digital phase locked
RESOLUTION BANDWIDTH	
RBW Range	3kHz, 30kHz, 220kHz, 4MHz
RBW Accuracy	15%
Video Bandwidth Range	1.6kHz/90kHz couple with RBW
AMPLITUDE	
Measurement Range	-100dBm~+20dBm
Overload Protection	+30dBm continuous, ±25VDC
Reference Level Range	-30dBm~+20dBm
Amplitude Display Range	75dB
Amplitude Accuracy	±1.5dB typical @ 0dBm, 80MHz
Frequency Flatness	±1.5dB over 100MHz, ±2.5dB typical over entire band/±3dB:150kHz~10MHz
Amplitude Level Linearity	±1.5dB over 70dB
DYNAMIC RANGE	
Average Noise Floor	-95dBm @30kHz RBW, -100dBm typical / -75dBm: 150kHz~10MHz
Third Inter-Modulation	<-70dBc, @-40dBm input, 2tones, 2MHz apart/ <-45dBc:150kHz~10MHz
Harmonic Distortion	<-40dBc, RF input < selected reference
Non-Harmonic Spurious	<-60dBc typical down from reference level, average, 5MHz/div
DISPLAY SYSTEM	
Display Device	CRT Display, 8 x 10 graticule, 6-inch waveform screen LCD Display, 4 line x 20 character data screen
Display Function	Center Frequency Control, Bandwidth, Reference Level, Span Range, Amplitude
FUNCTIONS	
Marker Mode	Absolute, relative, PK->marker, marker->center
Number of Markers	2
Marker Resolution	0.1dB, 1kHz
Marker Accuracy	0.1dB ± amplitude accuracy
Memory	9 memorise of save/recall
Trace	Max. hold, average(2~32 traces), freeze(Hold)
Setup	Access parameters

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
Calibrate Signal	80MHz, -30dBm
Interface	RS-232C standard & remote display software (The software will be downloaded from GW Wed-Site.)
POWER SOURCEAC	100V/120V/220V/230V ± 10%, 50/60Hz
ACCESSORIES	Instruction manual x 1, Power cord x 1
DIMENSIONS & WEIGHT	310(W) x 150(H) x 455(D) mm, Approx. 8.5kg

ORDERING INFORMATION

GSP-810 1GHz Spectrum Analyzer

OPTION

Opt. 01 TRACKING GENERATOR

Frequency Range	150kHz ~ 1GHz
Amplitude Range	0 ~ – 50 dBm
Amplitude Resolution	1 dB
Amplitude Accuracy	± 1 dB @ 0 dBm, 80 MHz
Attenuation Accuracy	± 1 dB @ 50 MHz
Amplitude Flatness	± 1 dB @ 10 MHz/DIV±1.5dB@0dB,entire band
Harmonics	< -30 dBc (<-25dBc, 150kHz ~ 10MHz)
Reverse Power	< +30 dBm
Impedance	50Ω nominal
Return Loss	< 10 dB (VSWR < 2)
Connector	Type N female

Opt. 02 POWER METER

Frequency Range	10MHz ~ 2 GHz, usable to 2.7GHz
Power Level Range	-20 dBm ~ +23 dBm, usable to +30 dBm
Power Level Overload	+40 dBm < 10% duty cycle, < 10 mS duration
Return Loss	< 1:1.35 VSWR into 50 ohms, < 1:1.25 typical
Readout Resolution	0.2 mW, 100 mW scale, 2 μW, 1 mW scale; 0.1dB, Log scale
Accuracy	± (10% rdg ± 1digit)
Readout	mW or dBm

Opt. 03 REMOTE CONTROL SOFTWARE

Connecting PC to get the trace and provide the control for setting

OPTIONAL ACCESSORIES

ADP-001: Adaptor, BNC(J/F) ~ N(P/M)
ADP-002: Adaptor, SMA(J/F) ~ N(P/M)
ADP-101: Adapter, BNC(J/F) 75Ω ~ BNC(P/M) 50Ω
ATN-100: 10dB Attenuator, N(J) ~ N(P)
GAK-001: Termination 50Ω, N(P)
GAK-002: Cap with chain, N(P)
ATA-001: BNC Antenna
GTL-301: Therefore cable assembly (RG223, N(P), 1000mm)
GTL-302: Therefore cable assembly (RG223, N(P), 300mm)
GTL-303: Therefore cable assembly (SMA(P), RD316, 600mm)
GTL-304: Therefore cable assembly (RG223, N(P)-N(J), 300mm)