

# Bench Spectrum Analysers

**GW INSTEK**



## GSP-830

- 9kHz ~ 3GHz.
- Autoset Function.
- High Brightness, Colour Display with VGA Output.
- Tracking Generator, Pre-Amplifier & Battery Options.
- USB Interface for use with Memory Sticks.

		GSP-830
<b>Frequency</b>	Frequency Range Aging Rate Span Rate Phase Noise Sweep Time Range	9kHz ~ 3GHz ±10ppm, 0-50°C, 5ppm/yr 2kHz ~ 3GHz in 1-2-5 Sequence, Full Span, Zero Span -80dBc/Hz @ 1GHz, 20kHz Offset Typical Minimum 50ms
<b>Resolution Bandwidth</b>	Range Accuracy Video Bandwidth Range	3kHz, 30kHz, 300kHz, 4MHz 15% 10Hz ~ 1MHz in 1-3 Steps
<b>Amplitude</b>	Measurement Range  Overload Protection Reference Level Range Accuracy Frequency Flatness Display Range Linearity	1MHz ~ 15MHz: -103dBm ~ 20dBm (Ref. Level ≥ -30dBm) 15MHz ~ 600MHz: -120dBm ~ 20dBm (Ref. Level = -50dBm) 600MHz ~ 2.3GHz: -117dBm ~ 20dBm (Ref. Level = -50dBm) 2.3GHz ~ 3GHz: -115dBm ~ 20dBm (Ref. Level = -50dBm) 30dBm, 25Vdc -110dBm ~ +20dBm ±1dB @ 100MHz ±1dB ±1dB over 70dB
<b>Dynamic Range</b>	Average Noise Floor (3kHz RBW)  Third Inter-Modulation Harmonic Distortion Non-Harmonic Spurious	1MHz ~ 15MHz: -105dBm (Ref. Level ≥ -30dBm) 15MHz ~ 600MHz: -119dBm (Ref. Level = -50dBm) 600MHz ~ 2.3GHz: -116dBm (Ref. Level = -50dBm) 2.3GHz ~ 3GHz: -114dBm (Ref. Level = -50dBm) <-70dBc (-40dBm Input, Ref. Level = -30dBm) <-60dBc (< -40dBm Input, Ref. Level = -30dBm) <-110dBm (3kHz RBW)
<b>Other Attributes</b>	Display Internal Memory  Markers Marker Functions Trace Detection Power Measurement Autoset Function Sequence	640 x 480 High Brightness Colour TFT LCD 10 Traces, 10 Panel Setups, 10 Limit Lines, 5 Antenna Corrections, 10 Sequences 10 Markers for Peaks, 5 Delta Marker Pairs; Functions: Delta, Peak, Marker Track 3 Traces with Peak, Max. Hold, Freeze, Avg & Trace Math ACPR, OCBW, Channel Power, N dB BW & Phase Jitter Autoset Function Available User Defined Automated Test Sequences

		<b>GSP-830</b>
<b>Connectors</b>	RF Input External Reference Reference Frequency Input  External Trigger Input Reference Clock Output DC Input RS-232C USB Connector  DC Voltage Output Terminal	N-Female, 50Ω BNC Female 1MHz, 1.544MHz, 2.048MHz, 5MHz, 10MHz, 10.24MHz, 13MHz, 15.36MHz, 15.4MHz, 19.2MHz BNC Female, 5V TTL BNC Female, 10MHz 12V, 5.5mm Jack 9 Pin Female Front Panel Host: Type A Connector Rear Panel Device: Type Mini-B Connector SMB Male, 9V, 100mA
<b>General</b>	Power Source Accessories Dimensions Weight	AC: 100 ~ 240V, 50/60Hz Power Cord x 1, Manual x 1 330mm (W) x 170mm (H) x 340mm (D) 6kg

#### ORDERING INFORMATION

Option 01	<b>Tracking Generator:-</b> Frequency Range 9kHz ~ 3GHz; Amplitude Range: -50dBm ~ 0dB; Amplitude Accuracy: ±1dB @ 100MHz 0dB; Amplitude Flatness: ±1dB ~ 0dBm; Harmonics: <-30dBc Typical; Reverse Power: 30dBm; Connector: N-Female, 50Ω
Option 02	<b>Battery Pack:</b> 10.8V Li-Ion Battery Pack.
Option 03	<b>±1ppm Stability:</b> ±1ppm, 0 ~ 50°C, ±1ppm/yr.
Option 04	<b>300Hz RBW:</b> 300Hz RBW, 3dB Bandwidth, 20% Accuracy.
Option 05*	<b>9kHz &amp; 120kHz RBW:</b> 9kHz & 120kHz RBW, 6dB Bandwidth, 15% Accuracy.
Option 06*	<b>10kHz &amp; 100kHz RBW:</b> 10kHz & 100kHz RBW, 3dB Bandwidth, 15% Accuracy.
Option 07*	<b>AM/FM Demodulator and 10kHz &amp; 100kHz RBW:</b> AM/FM Demodulation, Internal Speaker or 3.5mm Jack plus Bandwidths as per Option 06.
Option 08	<b>GPIB Interface:</b> GPIB / IEE.488 Option.
GSC-001	Soft Carrying Case.
GRA-404	Rack Mount Adapter.
EMI Kit	EMI Near-Field Probe Kit Set.
GKT-001	<b>General Kit Set</b> ADP-002: Adaptor, SMA (J/F) ~ N (P/M) x 2 ATN-100: 10dB Attenuator, N (J) ~ N (P) x 1 GTL-303: RF Cable Assembly (SMA (P), RD316, 600mm) x 2 GSC-002: Kit Box x 1
GKT-002	<b>CATV Kit Set</b> ADP-001: Adaptor, BNC (J / F) ~ N (P / M) x 2 ADP-101: Adaptor, BNC (J / F) 75Ω ~ BNC (P / M) 50Ω x 2 GTL-304: RF Cable Assembly (SMA (P), RD316, 600mm) x 2 GSC-003: Kit Box x 1
GKT-003	<b>RLB Kit Set</b> GAK-001: Termination 50Ω, N (P) x 1 GAK-002: Cap with Chain, N (P) x 1 GTL-302: RF Cable Assembly (RG223, N (P) – N (J), 300mm) x 2 GSC-004: Kit Box x 1
GTL-401	DC Power Cord for Cigarette Lighter Adapter.
GAP-801	Pre-Amplifier with 10dB Gain (Typical), 6kHz ~ 6GHz.

\* NOTE: Only 1 Option can be selected from Options 5-7.