## **GSP-8000 Series**

8.0GHz/3.8GHz/1.8GHz Spectrum Analyzer







The GSP-8000 series, brand new general spectrum analyzers from GW Instek, features three frequency ranges, namely 8.0GHz, 3.8GHz and 1.8GHz. The series is suitable for teaching research, R&D verification, and the test requirements of radio frequency products during production and development stages. The series provides 1Hz ~ 1MHz resolution bandwidth (RBW), 10Hz ~ 3MHz video bandwidth (VBW), -104dBc/Hz phase noise, a 20dB preamplifier, and the lowest noise floor of -160dBm/Hz (typical).

With respect to measurement applications, GSP-8000 has built-in Time Spec function, AM/FM signal demodulation function, channel test (Channel Power Measurement) function, Pass-Mail function, etc. The Time Spec function can simultaneously observe and display the correlation between power, frequency and time. ACPR/OCBW/CHPW tests can be used to test adjacent channels, power occupation bandwidth ratio, and channel power. The Pass-Fail function can be used to determine whether the signal is within the set range. Users can use these functions to conduct a wide range of measurement applications.

GSP-8000 utilizes a 10.4-inch TFT LCD large-size screen with XGA (1024\*768) resolution to allow an easy observation of test signals. For communication interface, GSP-8000 provides two interfaces: USB and LAN. Through the USB Host, users can quickly retrieve the files stored after measurements, while USB Device and LAN interface allow users to control the instrument through dedicated PC software, or use the corresponding command set to design the required program.

GSP-8000 provides EMI filter option. Customers can be activated through the corresponding software authorization (Soft-Key), which greatly improves usage efficiency.

## FEATURES

- \* Frequency Range
- GSP-8800 : 9kHz ~ 8.0GHz
- GSP-8380 : 9kHz ~ 3.8GHz
- GSP-8180 : 9kHz ~ 1.8GHz
- \* RBW: 1Hz ~ 1MHz in 1-3-5-10 steps
- \* VBW: 10Hz ~ 3MHz in 1-3-5-10 steps
- \* Phase Noise: -104 dBc/Hz
- \* Sensitivity: -160dBm/Hz Typical @PreAmp On
- \* Built-in AM/FM Demodulation
- \* Built-in Time Spec Function
- \* Measurement Function: ACPR/OCBW/CHPW, NdB BW, Pass-Fail, Freq. Counter, Noise Marker
- \* Built-in 20dB Preamplifier
- \* Communication Interface: LAN, USB Host/Device
- \* Display: 10.4" XGA Output (1024\*768)
- \* Options: EMI Filter

## APPLICATIONS

- \* Checking and Analysis of Spectrum Characteristics
- \* Monitor the Signal Uploaded by SNG Vehicle
- \* Analyze AM and FM Signal Characteristics
- \* For a Compact RF Test System
- \* Measuring the Frequency Response of RF Components
- \* Cables, Attenuators, Filters and Amplifiers...etc.

SPECIFICATIONS Mode		GSP-8180		GSP-8380		GSP-8800			
FREQUENCY FREQUENCY									
Range	9 kHz ~ 1.8 GHz		9	kHz ~ 3.8 GHz	9 ki	Hz ~ 8.0 GHz			
Resolution FREQUENCY SPAN	1 Hz								
Frequency Range		requency of instrument							
Span Uncertainty INTERNAL FREQUENCY REFERENCE	±span / (sweep points-	1)							
Frequency Range	10.000000 MHz								
Reference Frequency Accuracy Temperature Stability	<pre></pre>	ate × freq aging rate) + tempera	ture stability + initial accuracy						
Aging Rate	<1ppm/year								
Initial Accuracy SSB PHASE NOISE	< 1ppm								
Offset From Carrier		Hz, VBW = 1kHz, 20°C ~ 30°C, a	iverage ≥ 40						
10 kHz 100 kHz	< -104 dBc/Hz < -106 dBc/Hz, Typical								
1 MHz	< -115 dBc/Hz, Typical								
BANDWIDTH Resolution Bandwidth	1Hz to 1MHz (1-3-5-1)	) steps by sequence) ; EMI Filter	(6dB): 200Hz 9kHz 120kHz	1MHz (Optional)					
RBW Uncertainty	< 5%, Typical, RBW ≤ 1	MHz	(00B): 200112, 9K112, 120K112,						
Resolution Filter Shape Factor (60 dB: 3 Video Bandwidth (VBW)	< 5: 1, Typical, digital a 10 Hz ~ 3 MHz	nd close to Gaussian shape							
AMPLITUDE	10112 - 5 10112								
AMPLITUDE AND LEVEL	DANL ~ +10 dBm	100 kHz ~ 1 MHz, Preamp	o Off DANL ~ +10 dBm	100 kHz ~ 1 MHz, Preamp Off	DANL ~ +10 dBm	100 kHz ~ 10 MHz, Preamp Of			
Amplitude Measurement Range	DANL ~ +20 dBm	1 MHz ~ 1.8 GHz, Preamp		1 MHz ~ 3.8 GHz, Preamp Off	DANL ~ +20 dBm	10 MHz ~ 8 GHz, Preamp Off			
Reference Level Preamp	-80 dBm ~ +30 dBm, 0. 20 dB, 100 kHz ~ Max.								
Input Attenuation	0 ~ 40 dB, in 1 dB step	0 ~ 40 dB, in 1 dB step							
Max Input DC Voltage	50 VDC +30dBm, Average cont								
Max Continuous Power Displayed Average Noise Level (DANL)									
				1Hz, DETECTOR = SAMPLE, RBW = 1		05dBm /huminal) 00.45			
Broomp Off	9 kHz ~ 1MHz 1 MHz ~ 1 GHz	<-95 dBm (typical), <-88d <-140dBm (typical), <-130		<-95 dBm (typical), <-88dBm <-140dBm (typical), <-130 dBm	9 kHz ~ 1MHz 1 MHz ~ 500MHz	-95dBm (typical), <-88 dBm -140dBm (typical), <-130 dBm			
Preamp Off	1 GHz ~ 1.8 GHz	<-138dBm (typical), <-128		<-138dBm (typical), <-128 dBm	500MHz ~ 3GHz	-138dBm (typical), <-128 dBm			
				<u>+</u>	3GHz ~ 6GHz 6GHz ~ 8GHz	-134dBm (typical), <-124 dBm -129dBm (typical), <-119dBm			
				1Hz, DETECTOR = SAMPLE, RBW =					
Proomn On	100 kHz ~ 1MHz 1 MHz ~ 1 GHz	<-135 dBm (typical), <-128 <-160dBm (typical), <-150		<-135 dBm (typical), <-128dBm <-160dBm (typical), <-150 dBm	100 kHz ~ 1MHz 1 MHz ~ 500MHz	-135dBm (typical), <-128 dBm -160dBm (typical), <-150 dBm			
Preamp On	1 GHz ~ 1.8 GHz	<-160dBm (typical), <-150		<-160dBm (typical), <-150 dBm	500MHz ~ 3GHz	-160dBm (typical), <-150 dBm			
				+	3GHz ~ 6GHz 6GHz ~ 8GHz	-154dBm (typical), <144 dBm -149dBm (typical), <-139dBm			
FREQUENCY RESPONSE									
Filter Bandwidth Preamp Off, fc ≥100 kHz	±0.8 dB, 100K ~ Max. F		nuation = 10 dB, reference freq	uency = 50 MHz, SPAN = 200KHz, RE	BW = IUKHZ, VBW = IUK	HZ			
Preamp On, fc ≥1MHz	±0.9 dB, 100K ~ Max. F								
UNCERTAINTY AND ACCURACY RBW Switch Uncertainty	Reference: 10 kHz PBV	/ at Frequency Center is 50 MHz	z : +0.2 dB Log resolution						
Input Attenuation Uncertainty	20°C ~30°C, fc = 50 MH	Hz, Preamplifier Off, 10 dB RF at	ttenuation, $RBW = 10K$ ; $1 \sim 40$						
Absolute Amplitude Uncertainty Preamp Off	20°C to 30°C, fc = 50 N ±0.4 dB, input signal le		kHz, VBW=10 kHz, peak detec	ctor, 10 dB RF attenuation, average $\geq 2$	20, 2db/div, 95% confide	nce level			
Preamp On Preamp On	±0.5 dB, input signal le								
Uncertainty		iz, signal input range 0 ~ -50dBr	m, Ref Level range 0 ~ -50dBm	, 10 dB RF attenuation, RBW = 1kHz, \	VBW = 1kHz, Preamp Off				
VSWR	±1.5 dB(typical) <1.5, Nominal, Input 1	0 dB RF attenuation, 1MHz ~ 1.	8GHz / 3.8GHz		<1.8, Nominal, Input 20 c	IB RF attenuation, 1MHz ~ 8GHz			
DISTORTION AND SPURIOUS RESPONS Second Harmonic Distortion		off, signal input -20 dBm, 0 dB R	E attanuation 20%C - 20%C - 6	r Jp.					
Third-order Intermodulation				nuation 0 dB, preamplifier off, 20°C ~ :	30°C ; +10 dBm				
1 dB Gain Compression		0 dB RF attenuation, Preamp o							
Residual Response		input port, 0 dB input attenuatio z ~ Max. Frequency Range	in, 20°C to 30°C, average 2 40,	RBW = 300Hz, VBW = 3kHz, SPAN =	ZM				
Input Related Spurious SWEEP	<-60 dBc, -30 dBm sign	nal at input mixer, 20°C ~ 30°C							
Sweep Time									
Range		zero Span ; 1 ms ~ 3000 s, Zero	Span						
Sweep Mode TRACKING GENERATOR (OPTION 01)	Continuous; Single								
Tracking Generator Output	100 kHz ~ Max. Freque	Dan er							
Frequency Range Output Power Level Range	-40 dBm ~ 0 dBm								
Output Power Level Resolution Output Flatness	1 dB								
	± 3 dB Average total power: +30 dBm, DC : ±50 VDC								
Maximum Safe Reverse Level		30 dBm, DC : ±50 VDC							
Impedance	Average total power: +3 50 Ω, Nominal	30 dBm, DC : ±50 VDC							
Impedance Connector FREQUENCY COUNTER	Average total power: +3	30 dBm, DC : ±50 VDC							
Impedance Connector FREQUENCY COUNTER Frequency Counter	Average total power: +5 50 Ω, Nominal N Type Female								
Impedance Connector FREQUENCY COUNTER Frequency Counter Resolution Accuracy	Average total power: +3 50 Ω, Nominal N Type Female 1Hz, 10Hz, 100Hz, 1kH		+ counter resolution						
Impedance Connector FREQUENCY COUNTER Frequency Counter Resolution Accuracy INPUTS AND OUTPUTS	Average total power: +3 50 Ω, Nominal N Type Female 1Hz, 10Hz, 100Hz, 1kH	Hz	+ counter resolution						
Impedance Connector FREQUENCY COUNTER FREQUENCY COUNTER Accuracy Accuracy INPUTS AND OUTPUTS RF Input Impedance Impedance Impedance	Average total power: +3 50 Ω, Norninal N Type Female IHz, 10Hz, 100Hz, 1kH ±(frequency indication	Hz	+ counter resolution						
Impedance Connector FREQUENCY COUNTER Frequency Counter Accuracy INPUTS AND OUTPUTS RF Input Impedance Connector	Average total power: +: 50 Q, Nominal N Type Female 1Hz, 10Hz, 100Hz, 1kł ±(frequency indication	Hz	+ counter resolution						
Impedance Connector FREQUENCY COUNTER Frequency Counter Resolution Accuracy INPUTS AND OUTPUTS RF Input Impedance	Average total power: +3 50 Ω, Norninal N Type Female IHz, 10Hz, 100Hz, 1kH ±(frequency indication 50 Ω, Norninal N Type Female BNC Female	Hz	+ counter resolution						
Impedance Connector FREQUENCY COUNTER Frequency Counter Accuracy INPUTS AND OUTPUTS RF Input Impedance Connector Reference Input Connector IOMHZ Reference Amplitude	Average total power: +3 50 Ω, Nominal N Type Female 1Hz, 10Hz, 100Hz, 1kł ±(frequency indication 50 Ω, Nominal N Type Female	Hz	+ counter resolution						
Impedance Connector FREQUENCY COUNTER Frequency Counter Resolution Accuracy INPUTS AND OUTPUTS RF Input Impedance Connector Reference Input Connector	Average total power: +3 50 Ω, Norninal N Type Female IHz, 10Hz, 100Hz, 1kH ±(frequency indication 50 Ω, Norninal N Type Female BNC Female	Hz	+ counter resolution						
Impedance Connector FREQUENCY COUNTER Frequency Counter Resolution Accuracy INPUTS AND OUTPUTS RF Input Impedance Connector Reference Input Connector 10MHz Reference Amplitude Trigger Input Impedance 10MHz Reference Amplitude	Average total power: +1         50 Ω, Nominal         N Type Female         1Hz, 10Hz, 10Hz, 1kł         ±(frequency indication         50 Ω, Nominal         N Type Female         BNC Female         0 dBm to +10 dBm	Hz	+ counter resolution						
Impedance Connector FREQUENCY COUNTER FreQuency Counter Accuracy INPUTS AND OUTPUTS RF Input Impedance Connector 10MHz Reference Amplitude Trigger Input Impedance 10MHz Reference Amplitude Urgger Input Umpedance UMHz Reference Amplitude USB USB Host	Average total power: +1         S0 Ω, Nominal         N Type Female         1Hz, 10Hz, 10Hz, 1kł         ±(frequency indication         50 Ω, Nominal         N Type Female         BNC Female         BNC Female         1 kΩ         BNC Female         Connector: A Plug, Pro	Hz × frequency reference accuracy) reference accuracy tocol: USB 2.0 (Host End)	+ counter resolution						
Impedance Connector REQUENCY COUNTER Requency Counter Resolution Accuracy NPUTS AND OUTPUTS RF Input Impedance Connector Reference Input Connector 10MHz Reference Amplitude Trigger Input Impedance 10MHz Reference Amplitude USB Host USB Host USB Device	Average total power: +1         50 Ω, Nominal         N Type Female         1Hz, 10Hz, 100Hz, 1kł         ±(frequency indication         50 Ω, Nominal         N Type Female         BNC Female         0 dBm to +10 dBm         1 kΩ         BNC Female	Hz × frequency reference accuracy) reference accuracy tocol: USB 2.0 (Host End)	+ counter resolution						
Impedance Connector FREQUENCY COUNTER Frequency Counter Accuracy INPUTS AND OUTPUTS RF Input Impedance Connector Connector 10MHz Reference Amplitude Trigger Input Impedance 10MHz Reference Amplitude USB USB Host	Average total power: +1         50 Ω, Nominal         N Type Female         1Hz, 10Hz, 10Hz, 1kł         ±(frequency indication         50 Ω, Nominal         N Type Female         BNC Female         1 kΩ         BNC Female         Connector: A Plug, Pro Connector: A Plug, Pro	Hz × frequency reference accuracy) reference accuracy tocol: USB 2.0 (Host End)							
Impedance Impeda	Average total power: +1         50 Ω, Nominal         N Type Female         1Hz, 10Hz, 10Hz, 1kH         ±(frequency indication         50 Ω, Nominal         N Type Female         BNC Female         BNC Female         0 dBm to +10 dBm         1 kΩ         BNC Female         Connector: A Plug, Pro         Connector: B Plug, Pro         10.4" TFT LCD, Resolut         USB Device: B Plug, Store	Hz × frequency reference accuracy) tocol: USB 2.0 (Host End) tocol: 2.0 Version tion: 1024*768, Color: 65,536 cc	olors	ase-T/100Base-Tx					
Impedance Connector FREQUENCY COUNTER FreQuency Counter Resolution Accuracy INPUTS AND OUTPUTS RF Input Impedance Connector Connector 10MHz Reference Amplitude Trigger Input Impedance 10MHz Reference Amplitude USB USB Host USB Device GENERAL Display	Average total power: +1         50 Ω, Nominal         N Type Female         1Hz, 10Hz, 100Hz, 1kł         ±(frequency indication         50 Ω, Nominal         N Type Female         BNC Female         1 kΩ         BNC Female         Connector: A Plug, Pro Connector: B Plug, Pro         Connector: B Plug, Pro         I0.4" TFT LCD, Resolut         USB Device: B Plug, su Internal Memory: 256h	Hz × frequency reference accuracy) tocol: USB 2.0 (Host End) tocol: 2.0 Version tion: 1024*768, Color: 65,536 cc	olors Interface : RJ-45, supports 108	ase-T/100Base-Tx					
Impedance Connector ResQUENCY COUNTER Frequency Counter Resolution Accuracy INPUTS AND OUTPUTS RF Input Impedance Connector Reference Input Connector 10MHz Reference Amplitude Trigger Input Impedance 10MHz Reference Amplitude USB USB Host USB USB Host USB CENERAL Display Remote Control Mass Memory Temperature Relative Humidity	Average total power: +1         S0 Ω, Nominal         N Type Female         1Hz, 10Hz, 10Hz, 1kł         ±(frequency indication         50 Ω, Nominal         N Type Female         BNC Female         0 dBm to +10 dBm         1 kΩ         BNC Female         Connector: A Plug, Pro         Connector: B Plug, Pro         10.4" FFT LCD, Resolut         USB Device: B Plug, Station         Operating Temperature         O°C to 30°C : \$95%; 31	Hz × frequency reference accuracy) tocol: USB 2.0 (Host End) tocol: 2.0 Version tion: 1024*768, Color: 65,536 cc pports USB TMC ; LAN TCP/IP 4 Bytes to °C To 40°C ; Storage Temper	olors Interface : RJ-45, supports 108	ase-T/100Base-Tx					
Impedance Connector REQUENCY COUNTER Frequency Counter Resolution Accuracy INPUTS AND OUTPUTS RF Input Impedance Connector Connector 10MHz Reference Amplitude Trigger Input Impedance 10MHz Reference Amplitude USB USB Host USB Host USB Device ENERAL Display Remote Control Mass Memory Temperature Relative Humidity Power Consumption	Average total power: +:         30 Ω, Nominal         N Type Female         1Hz, 10Hz, 100Hz, 1kł         ±(frequency indication         50 Ω, Nominal         N Type Female         BNC Female         0 dBm to +10 dBm         1 kΩ         BNC Female         Connector: A Plug, Pro         Connector: B Plug, Pro         10.4" TFT LCD, Resolu         USB Device: B Plug, Su         Internal Memory: 256h         Operating Temperatur         0°C to 30°C : \$95% ; 31         28W	Hz × frequency reference accuracy) tocol: USB 2.0 (Host End) tocol: 2.0 Version tion: 1024*768, Color: 65,536 cc pports USB TMC ; LAN TCP/IP A Bytes e: 0 °C to 40°C ; Storage Temper 0°C to 40°C : ≤ 75%	olors Interface : RJ-45, supports 108 'ature: -20°C to 70°C	ase-T/100Base-Tx					
Impedance Connector Resolution Accuracy Accuracy Accuracy INPUTS AND OUTPUTS Reference Input Impedance Connector Reference Input Connector INPUTS Reference Amplitude Trigger Input Impedance USB USB Host USB USB Host USB ERAL Display Remote Control Mass Memory Temperature Relative Humidity Power Consumption Dimensions & Weight AC Power Socket	Average total power: +1         S0 Ω, Nominal         N Type Female         1Hz, 10Hz, 10Hz, 1kł         ±(frequency indication         50 Ω, Nominal         N Type Female         BNC Female         BNC Female         0 dBm to +10 dBm         1 kΩ         BNC Female         Connector: A Plug, Pro         Connector: B Plug, Pro         IO4" TFT LCD, Resolut         USB Device: B Plug, sui         Internal Memory: 256h         O'C to 30 C: 59%; 31         28W         421(W) x 221(H) x 115         100V – 240V, 50/60Hz	Hz × frequency reference accuracy) tocol: USB 2.0 (Host End) tocol: 2.0 Version tion: 1024*768, Color: 65,536 cc ports USB TMC ; LAN TCP/IP # Bytes e: 0 °C to 40°C ; Storage Temper OC to 40°C ; 575% 5(D) mm; Approx. 5.0 kg (withou	olors Interface : RJ-45, supports 10B rature: -20°C to 70°C ut package)						
Impedance Connector Resolution Accuracy Accuracy INPUTS AND OUTPUTS Resolution Accuracy INPUTS AND OUTPUTS RF Input Impedance Connector Reference Input Connector 10MHz Reference Amplitude Trigger Input Impedance 10MHz Reference Amplitude USB USB Host USB USB USB Host USB USB Device GENERAL Display Remote Control Mass Memory Temperature Relative Humidity Power Consumption Dimensions & Weight AC Power Socket The specifications apply when the function g	Average total power: +1         S0 Ω, Nominal         N Type Female         1Hz, 10Hz, 10Hz, 1kH         ±(frequency indication         50 Ω, Nominal         N Type Female         BNC Female         BNC Female         0 dBm to +10 dBm         1 kΩ         BNC Female         Connector: A Plug, Pro         Connector: B Plug, Pro         IO4" TFT LCD, Resolut         USB Device: B Plug, sui         Internal Memory: 256h         OPc to 30 C: 59%; 31         28W         421(W) x 221(H) x 115         100V – 240V, 50/60Hz         generator is powered on for at	+z × frequency reference accuracy) tocol: USB 2.0 (Host End) tocol: 2.0 Version tion: 1024*768, Color: 65,536 cc ports USB TMC ; LAN TCP/IP A Bytes e: 0 °C to 40°C ; Storage Temper 0 °C to 40°C ; 575% 5(D) mm; Approx. 5.0 kg (without t least 30 minutes under +20°C~+	olors Interface : RJ-45, supports 10B rature: -20°C to 70°C ut package) +30°C.	Specifications subject to c	hange without notice	2. GSP-8000_E_D1D			
Impedance Connector RREQUENCY COUNTER Frequency Counter Resolution Accuracy INPUTS AND OUTPUTS RF Input Impedance Connector 10MHz Reference Amplitude Trigger Input Impedance 10MHz Reference Amplitude USB USB Host USB Bosvice GENERAL Display Remote Control Mass Memory Temperature Relative Humidity Power Consumption Dimensions & Weight AC Power Socket The specifications apply when the function g	Average total power: +1         50 Ω, Nominal         N Type Female         1Hz, 10Hz, 100Hz, 1kł         ±(frequency indication         50 Ω, Nominal         N Type Female         BNC Female         0 dBm to +10 dBm         1 kΩ         BNC Female         Connector: A Plug, Pro         Connector: B Plug, Pro         10.4" TFT LCD, Resolut         USB Device: B Plug, Su         Internal Memory: 256h         Operating Temperature         0 C to 30 C : \$95%; 3:         28W         421(W) × 221(H) × 115         100V - 240V, 50/60Hz         Yererator is powered on for at	+z × frequency reference accuracy) tocol: USB 2.0 (Host End) tocol: 2.0 Version tion: 1024*768, Color: 65,536 cc ports USB TMC ; LAN TCP/IP A Bytes e: 0 °C to 40°C ; Storage Temper 0 °C to 40°C ; 575% 5(D) mm; Approx. 5.0 kg (without t least 30 minutes under +20°C~+	olors Interface : RJ-45, supports 10B rature: -20°C to 70°C ut package)	Specifications subject to c	hange without notice	<ul> <li>GSP-8000_E_D1D1</li> </ul>			
Impedance Connector FREQUENCY COUNTER Frequency Counter Resolution Accuracy INPUTS AND OUTPUTS RF Input Impedance Connector TOMHz Reference Amplitude Trigger Input Impedance 10MHz Reference Amplitude USB USB Host USB Host USB Host USB Device GENERAL Display Remote Control Mass Memory Temperature Relative Humidity Power Consumption Dimensions & Weight AC Power Socket The specifications apply when the function g OCDERINC INFORMAT GSP-8800 8.0CHZ Sp	Average total power: +:         30 Ω, Nominal         N Type Female         1Hz, 10Hz, 10Hz, 1kH         ±(frequency indication         50 Ω, Nominal         N Type Female         BNC Female         0 dBm to +10 dBm         1 kΩ         BNC Female         Connector: A Plug, Pro         Connector: B Plug, Pro         Connector: B Plug, Pro         Internal Memory: 256h         Operating Temperature         0° C to 30°C : \$ 595%; 3         28W         421(W) × 221(H) × 115         1000 – 240V, 50/60Hz         Perenator is powered on for at         CON	Hz × frequency reference accuracy) tocol: USB 2.0 (Host End) tocol: 2.0 Version tion: 1024*768, Color: 65,536 cc pports USB TMC ; LAN TCP/IP A Bytes e: 0 °C to 40°C ; Storage Temper 0°C to 40°C ; Storage Temp	olors Interface : RJ-45, supports 10B rature: -20°C to 70°C ut package) +30°C.	Specifications subject to c	ADP-001 N(M)	BNC(F) Adapter			
Impedance Connector FREQUENCY COUNTER Frequency Counter Resolution Accuracy INPUTS AND OUTPUTS RF Input Impedance Connector 10MHz Reference Amplitude Trigger Input Impedance 10MHz Reference Amplitude USB USB Host USB Bosvice GENERAL Display Remote Control Mass Memory Temperature Relative Humidity Power Consumption Dimensions & Weight AC Power Socket The specifications apply when the function g ORDERING INFORMAT GSP-8800 S.O.GHz Sp GSP-8800(TG) 8.0.GHz Sp GSP-8800(TG) 8.0.GHz Sp	Average total power: +1         50 Ω, Nominal         N Type Female         1Hz, 10Hz, 100Hz, 1kł         ±(frequency indication         50 Ω, Nominal         N Type Female         BNC Female         0 dBm to +10 dBm         1 kΩ         BNC Female         Connector: A Plug, Pro         Connector: B Plug, Pro         Connector: B Plug, Pro         Internal Memory: 256h         Operating Temperature         0 C to 30 C : \$95% : 3         28W         421(W) × 221(H) × 115         100V - 240V, 50/60Hz         erenerator is powered on for at         CON         peectrum Analyzer weectrum Analyzer weetrum	Hz × frequency reference accuracy) tocol: USB 2.0 (Host End) tocol: 2.0 Version tion: 1024*768, Color: 65,536 cc ports USB TMC ; LAN TCP/IP 4 Bytes :0 °C to 40°C ; Storage Temper OC to 40°C ; Storage Temper C to 40°C ; Storage Temper OC to 40°C ; Storage Temper OC to 40°C ; Storage Temper C to 40°C ; Storage Temper OC to 40°C ; Storage Temper C to 40°C ; Storage Temper OC to 40°C ; Storage Temper (C to	olors Interface : RJ-45, supports 10B ature: -20°C to 70°C ut package) +30℃. IONAL ACCESSORIE	Specifications subject to c S 1 Option for GSP-8800	ADP-001 N(M) ADP-002 N(M)	BNC(F) Adapter SMA(F) Adapter			
Impedance Connector REQUENCY COUNTER Frequency Counter Resolution Accuracy INPUTS AND OUTPUTS RF Input Impedance Connector Reference Input Connector IOMH2 Reference Amplitude Trigger Input Impedance USB USB Host USB USB Host USB USB Host USB USB Host USB USB Remote Control Mass Memory Temperature Relative Humidity Power Consumption Dimensions & Weight Ac Power Socket The specifications apply when the function g ORDERING INFORMATI GSP-8300 (TG) 8.0CHz Sp GSP-8380(TG) 8.CHz Sp GSP-8380(TG) 1.8CHz Sp GSP-8180(TG) 1.8CHz Sp	Average total power: +:         30 Ω, Nominal         N Type Female         1Hz, 10Hz, 10Hz, 1kH         ±(frequency indication         50 Ω, Nominal         N Type Female         BNC Female         BNC Female         0 dBm to +10 dBm         1 kΩ         BNC Female         Connector: A Plug, Pro         Connector: B Plug, Pro         Connector: B Plug, Pro         Operating Temperature         0°C to 30°C : ≤ 95% ; 3         28W         421(W) × 221(H) × 115         100V – 240V, 50/60Hz         generator is powered on for at         TON         Peetrum Analyzer	+z × frequency reference accuracy) tocol: USB 2.0 (Host End) tocol: 2.0 Version tion: 1024*768, Color: 65,536 cc ports USB TMC ; LAN TCP/IP A Bytes e: 0°C to 40°C ; Storage Temper 0°C to 40°C ; 575% 5(D) mm; Approx. 5.0 kg (without t least 30 minutes under +20°C~+4 ith TG ith TG ith TG ith TG	olors Interface : RJ-45, supports 10B rature: -20°C to 70°C ut package) +30℃. IONAL ACCESSORIE 8800E1 EMI Activatior	Specifications subject to c S 1 Option for GSP-8800 1 Option for GSP-8380	ADP-001 N(M) ADP-002 N(M) GTL-301 N(M)	BNC(F) Adapter SMA(F) Adapter N(M) RF Cable			
Impedance Connector Resolution Accuracy Resolution Accuracy INPUTS AND OUTPUTS RF Input Impedance Connector Reference Input Connector IOMH2 Reference Amplitude Trigger Input Impedance USB USB Host USB USB Host USB USB Host USB USB Host USB Remote Control Mass Memory Temperature Relative Humidity Power Consumption Dimensions & Weight AC Power Socket The specifications apply when the function g ORDERING INFORMAT GSP-8800 SOCH2 Sp GSP-8800 SOCH2 Sp GSP-8800 CGP	Average total power: +:         30 Ω, Nominal         N Type Female         1Hz, 10Hz, 10Hz, 1kH         ±(frequency indication         50 Ω, Nominal         N Type Female         BNC Female         BNC Female         0 dBm to +10 dBm         1 kΩ         BNC Female         Connector: A Plug, Pro         Connector: B Plug, Pro         Connector: B Plug, Pro         Onerating Temperature         0 C to 30°C: \$95%; 31         28W         421(W) × 221(H) × 115         100V - 240V, 50/60Hz         generator is powered on for at         CON         Poetrum Analyzer weetrum Analyzer wetrum Analyzer wetrum An	+z × frequency reference accuracy) tocol: USB 2.0 (Host End) tocol: 2.0 Version tion: 1024*768, Color: 65,536 cc ports USB TMC ; LAN TCP/IP A Bytes e: 0°C to 40°C ; Storage Temper 0°C to 40°C ; 575% 5(D) mm; Approx. 5.0 kg (without t least 30 minutes under +20°C~+4 ith TG ith TG ith TG ith TG	olors Interface : RJ-45, supports 10B rature: -20°C to 70°C ut package) +30°C. IONAL ACCESSORIE 8800E1 EMI Activatior 8380E1 EMI Activatior	Specifications subject to c S 1 Option for GSP-8800 1 Option for GSP-8380	ADP-001 N(M) ADP-002 N(M) GTL-301 N(M)	BNC(F) Adapter SMA(F) Adapter			

