



Features

- Frequency Range from 9KHz up to 1.5GHz, 9KHz up to 3.6GHz
- 150dBm Displayed Average Noise Level
- Phase Noise -82dBc/Hz @ 1Gz and offset at 10KHz
- Total Amplitude Accuracy <1.5dB
- 10Hz Minimum Resolution Bandwidth (RBW)
- EMI Pre-compliance Test Kit
- · Up to 1.5 GHz Tracking Generator Kit
- 10.4" TFT LCD display

Performance Specifications

Parameters	MP700022 EU-UK	MP700023 EU-UK	MP700777	
Frequency Range	9kHz - 1.5GHz	9kHz - 3.6GHz	9kHz - 7.5GHz	
Frequency Resolution	1Hz			
Frequency span				
Range	0Hz, 100Hz to maximum frequency of device			
Accuracy	± span / (swept points -1)			
Internal Reference				
Reference Frequency	10 MHz			
Reference Frequency Accuracy	±[(days from last calibrate × freq. aging rate) + temperature stability +initial accuracy]			
Temperature Stability	<2.5ppm (15°C to 35°C)		<1ppm (15°C to 35°C)	
Aging Rate	<1ppm/year			
Readout				
Marker Frequency Resolution	span/ (the number of sweep points -1)			
Uncertainty	±(freq indication × freq reference uncertainty +1%× span +10%× resolution bandwidth + Marker Frequency Resolution)			
Frequency Counter				
Resolution	1Hz,10Hz,100Hz, 1kHz			
Accuracy	±(marker freq × freq reference uncertainty + counter resolution)			





10Hz to 500kHz (in 1 to 10 <5:1 nominal (Digital imple <5% nominal 10Hz to 3MHz DANL to +20 dBm, close to -80 dBm to +30 dBm, 0.1d 20dB, nominal, 9kHz~1.50 0~40dB, 1dB steps 50V DC	ement, similar to Gauss Patte he preamplifier IBm steps	ern)	
<5:1 nominal (Digital imple) <5% nominal 10Hz to 3MHz DANL to +20 dBm, close the second of	ement, similar to Gauss Patte he preamplifier IBm steps GHz	ern)	
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20dB, nominal, 9kHz~1.50 0~40dB, 1dB steps	GHz		
0~40dB, 1dB steps	1		
	0~50dB 1dB stens		
50V DC	TO SOUD, TUD SICPS		
1 30 V DC			
30dBm, average continuou	30dBm, average continuous power		
L)			
bandwidth			
1MHz~10MHz -140dBm (r	1MHz~10MHz -140dBm (nominated)		
10MHz~1GHz -140dBm (r	10MHz~1GHz -140dBm (nominated)		
1GHz~1.5GHz -138dBm (nominated)	1GHz~3.6GHz -138dBm (nominated)	1GHz~3.6GHz -138dBn (nominated) 4GHz~5GHz,-133dBm (nominated) 5GHz~6GHz,-128dBm (nominated) 6GHz~7GHz-123dBm (nominated) 7GHz~7.5GHz,-118dBn (nominated)	
1MHz ~ 10MHz -160dBm	1MHz ~ 10MHz -160dBm (nominated)		
10MHz ~ 1GHz -160dBm (nominated)			
1GHz~1.5GHz -158dBm (nominated)	1GHz~3.6 GHz -158dBm (nominated)	1GHz~4GHz -158dBm (nominated) 4GHz~5GHz -153dBm (nominated) 5GHz~6GHz -148dBm (nominated) 6GHz~7GHz -143dBm (nominated) 7GHz~7.5GHz -138dBn (nominated)	
	1MHz~10MHz -140dBm (r 10MHz~1GHz -140dBm (r 10MHz~1GHz -140dBm (r 1GHz~1.5GHz -138dBm (nominated) 1MHz ~ 10MHz -160dBm 10MHz ~ 1GHz -160dBm	1MHz~10MHz -140dBm (nominated) 10MHz~1GHz -140dBm (nominated) 1GHz~1.5GHz -138dBm (nominated) 1GHz~3.6GHz -138dBm (nominated) 1MHz ~ 10MHz -160dBm (nominated) 10MHz ~ 1GHz -160dBm (nominated) 1GHz~3.6 GHz -158dBm	





Parameters	MP700022 EU-UK	MP700023 EU-UK	MP700777
	<-82 dBc/Hz @10kHz offset		<-98dBc/Hz @10kHz offset
Phase noise	<-100 dBc/Hz @100kHz offset		
	<-110 dBc/Hz @1MHz offset		
Level Display Range			
Log Scale Coordinate	1dB ~255dB		
Linear Scale Coordinate	0 to reference level		
Level Unit	dBm, dBuW, dBpW, dBmV, dBuV, W,V		
Points	201~1001		
Number of Traces	5		
Detectors	Positive-peak, negative-peak	ak, sample, normal, RMS	
Trace Functions	Clear write, Max Hold, Min Hold, View, Blank, Average		
Frequency response	•		
	20°C~30°C, 30%~70% relative humidity, 20dB input attenuation, reference 50MHz		
Preamp off	±0.8 dB		
Preamp on	±0.9 dB		
Accuracy	•		
Input Attenuation Switching Uncertainty	20°C~30°C, fc=50 MHz, Preamplifier Off, 20dB RF attenuation, input signal 0~39 dB ±0.5 dB		
Absolute Amplitude Uncertainty	20°C~30°C fc=50 MHz, RBW=1 kHz, VBW=1 kHz, peak detector, 20dB RF attenuation Preamplifier Off ±0.4dB, input signal= -20dBm Preamplifier On ±0.5 dB, input signal= -40dBm		
	input signal range 0dbm ~ -50dbm		
Uncertainty	±1.5dB		
VSWR	Input 10dB RF attenuation,	1MHz~1.5GHz	Input 20dB 1MHz~7.5GHz
	<1.5, nominal		
Distortion and Spurious Response			
Consider the second of the sec	fc ≥ 50 MHz, Preamp off, s	ignal input -30 dBm, 0 dB R	RF attenuation, 20°C~30°C
Second Harmonic Distortion	-65dbc		
	fc ≥50MHz		
Third-order Intermodulation	+2dBm (NSA1015/NSA1032/NSA1036) +10dBm (NSA1075)		
4 40 0-1- 0	fc ≥ 50MHz, 0 dB RF attenuation, Preamp off, 20°C~30°C		
1 dB Gain Compression	+2 dBm, nominal		
Davidsol Davasas	Connect 50Ω load at input port, 0 dB input attenuation, 20°C~30°C		
Residual Response	<-85dBm, Nominated		
	-30 dBm signal at input mixer, 20°C~30°C		
Input Related Spurious	<-60 dBc		





Parameters	MP700022 EU-UK	MP700023 EU-UK	MP700777	
Sweep Time and Triggering	•			
Span Range	100Hz≤SPAN≤3GHz 10ms to 3000s zero sweep width 1ms to 3000s			
Mode	Continue, Single			
Trigger	Free run, Video			
Tracking Generator				
Output frequency range	100kHz~1.5GHz	100 kHz~3.6 GHz Tracking generator 35 MHz~3.6 GHz Tracking generator	100 kHz~7.5 GHz Tracking generator	
Output power level range	-30 dBm~0 dBm	-40 dBm~0 dBm		
Output power level resolution	1 dB			
Output flatness	±3 dB	±3 dB		
Maximum safe reverse level	Average total power: 30	Average total power: 30 dBm, DC: ±50V DC		
Inputs and Outputs				
Front panel RF input connector	50Ω, N-type female	50Ω, N-type female		
Front panel track generator output	50Ω, N-type female	50Ω, N-type female		
10 M reference input	50Ω, N-type female	50Ω, N-type female		
Communication Port	USB HOST, USB DEVIC	CE, LAN, earphone port, REF	and VGA	
General Technical Specification				
Display	TFT LCD,10.4 inches	TFT LCD,10.4 inches		
Weight (without package)	5 kg	5 kg		
Dimension (W × H × D)	421mm × 221mm × 115	421mm × 221mm × 115mm		
Working temperature	0 to +40°C	0 to +40°C		
Storage temperature	-20°C to +60°C	-20°C to +60°C		
Power	100V AC to 240V AC 50	100V AC to 240V AC 50/60Hz		
Standard Accessories Included	Power cord, USB cable,	Power cord, USB cable, CD-Rom, Manual		
Power Cord Plug Type	UK / EU	UK / EU		
Warranty	03 years			

Standard Accessories









Power Cord

CD Rom

Quick Guide

USB Cable





Options Accessories











N-N Cable (MP700418)

N-SMA Cable (MP700419)

SMA-SMA Cable (MP700420)

SMA Adapter (MP700422)

SMA Adapter (MP700422)



Near Field Probe includes: Four near-field probes, N-SMA adapter, SMA-SMA cable (Frequency range: 30 MHz - 3 GHz) (MP700423)

Part Number Table

Description	Part Number
Spectrum Analyser, 9KHz - 1.5GHz	MP700022 EU-UK
Spectrum Analyser, 9KHz - 3.6GHz	MP700023 EU-UK
Spectrum Analyser, 9kHz 7.5GHz	MP700777

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