TFG3600 Series Synthesized Signal Generators

Features

- Perfect combination of DDS and PLL techniques
- Frequency upper limits to 1.5GHz
- Higher level of frequency accuracy, up to 1ppm
- Complete AM/FM/FSK/PSK modulation function
- Standard communication interface: USB Device and RS-232

Standard Accessories

Power Cord	1
BNC Testing cable	1
CD(Software+ User's Guide)	1

Options

Frequency Counter
(upper limits to 2.5GHz, only for TFG3605)

GPIB

Specification

CHA		TFG3605	TFG3610	TFG3615
Frequency				
Range	Sine	1μHz ~ 500MHz	1μHz ~ 1000MHz	1μHz ~ 1500MHz
	Square	1μHz ~ 80MHz		
Resolution		1μHz (carrier frequency≤80MHz) 1Hz (carrier frequency>80MHz)		
Accuracy		±1ppm, Frequency≥1.0kHz,18℃ to 28℃ ±50ppm, Frequency<1.0kHz,Min. output 1μHz		
Sine Output Level				
Range	Freq≤500MHz	-127dBm ~ +13dBm(-127dBm ~ -117dBm typ.)		
	Freq≤1000MHz	-110dBm ~ +13dBm(-100dBm ~ -110dBm typ.)		
	Freq≤1500MHz	-105Bm ~ +10dBm(-100dBm ~ -105dBm typ.)		
Resolution		0.1dB		
Accuracy	Freq≤300MHz	setting value ±1dBm (output level +13dBm~-100dBm)		
	Freq≤1500MHz	setting value±2.2dBm (output level +13dBm~-80dBm, setting value ±1.5dBm typ.) setting value ±2.7dBm (output level -80dBm~-100dBm, setting value ±2.0dBm typ.)		
Stationary Wave Ratio (SWR)		<1.8 (output level≤0dBm)		
Spectral Purity				
Harmonic		< -33dBc (output level≤4dBm,typ.)		
Non-Harmonic		<-40dBc (output level≤4dBm, deviation CF≥5kHz)		
Sub-Harmonic		<-40dBc (output level≤4dBm)		
Residual FM		< 100Hz (BW: 0.3 ~ 3kHz, RMS < 120MHz)		
Square				
Rise/Fall Time		≤15ns		
Overshoot		≤5%		
Modulation				
Type		AM,FM, FSK, PSK		
External Modulation Input		Voltage Range: 5V full scale, Input impedance:10kΩ, Frequency: DC to 10kHz		
Frequency Sweep				
Sweep Rate		1ms ~ 800s Linear (carrier ≤80MHz) 100ms ~ 800s Logrithm(carrier ≤80MHz)		
Step Time		50ms ~ 10s Linear (carrier>80MHz)		
Burst(Carrier Frequency ≤80MHz)				
Burst Count		1 ~ 10000 cycles		
Interval		0.1ms ~ 800s		
CHB				
Frequency				
Range		1μHz ~ 10MHz		
Resolution		1μHz		
Accuracy		±1ppm, Frequency≥1.0kHz,18℃ to 28℃ ±50ppm, Frequency<1.0kHz,Min. output 1μHz		
Waveform				
Type		Sine, Square, Ramp, Pulse, Sinc, Exp, Noise, DC		
Square	Rise/Fall Time	≤50ns		
	Duty Cycle	0.01% ~ 99.99%		
Pulse	Rise/Fall Time	≤50ns		
	Pulse Width	20ns ~ 20s		
Ramp	Symmetry	0.0% ~ 100.0%		
Output				
Amplitude		1mVpp ~ 10Vpp(50Ω), 2mVpp ~ 20Vpp(High Z)		
Offset		±5Vpk ac+dc(50Ω), ±10Vpk ac+dc(High Z)		
Resolution		5mVpp		
Accuracy		±(1% of setting + 10mVpp) (1kHz Sine)		
Flatness		± 0.5dB(1MHz Sine,1Vpp)		
General Characteristics				
Power		AC 100V~240V, 50/60Hz, 50VA Max		
Dimension & Weight		254×103×374 mm, 4.2 kg		