



SDG800 Series - Features and Benefits



Delivery Detail: 1 week
Payment Terms: T/T, Western Union



- 3.5 inch TFT-LCD display with single channel
- Frequency range from 1µHz to 5/10/30MHz
- 125MSa/s sample rate, 14bit vertical resolution
- 5 types of standard output waveform, built-in 46 arbitrary waveforms
- Provide 10 nonvolatile storage spaces for user's arbitrary waves
- Modulation functions: AM, DSB-AM, FM, PM, FSK, ASK, PWM, Sweep, Burst
- Abundant input/output: waveform output, Synchronous signal output, external trigger input.
- Supplied with powerful arbitrary editing software
- Support remote control
- Standard interfaces: USB Device, USB Host

Specifications	SDG805	SDG810	SDG830
Waveform	Sine, Square, Ramp, Pulse, Gaussian Noise. 46 built-in arbitrary waveforms(include DC)		
Sine	1µHz~5MHz	1µHz~10MHz	1µHz~30MHz
Square	1µHz~5MHz	1µHz~10MHz	1µHz~10MHz
Pulse	500µHz~5MHz		
Ramp/Triangular	1µHz~300kHz		
Gaussian white noise	>5MHz (-3dB)	>10MHz(-3dB)	>30MHz (-3dB)
Arbitrary	1µHz ~ 5MHz		
Resolution	1µHz		
Accuracy	Within 90daysv±50ppm within 1 year ±100ppm 18°C~28°C		
Temperature coefficient	<5ppm/°C		
Sine Spectrum Purity			
Harmonic Distortion	DC~1MHz:<-60dBc	1MHz~10MHz:<-55dBc	10MHz~30MHz:<-50dBc
Total harmonic waveform distortion	DC~20kHz 1Vpp<0.2%		
Spurious signal(non-harmonic)	DC~1MHz:<-70dBc	1MHz~10MHz:<-60dBc	10MHz~30MHz:<-55dBc
Phase noise	10kHz Offset,-108dBc/Hz(typical value)		
Square			
Rise/fall time	<24ns(10% ~ 90%)		
Overshoot	<5%(typical,1kHz,1Vpp)		
Duty Cycle	20%~80%		
Asymmetric	1% of period+20ns(typical,1kHz,1Vpp)		
Jitter	500ps + 0.001% of period		
Ramp/Triangle			
Linearity	<0.1% of Peak value output(typical,1kHz,1Vpp,100% symmetric)		
Symmetry	0%~100%		
Pulse			
Pulse width	16ns, Min. 1ns resolution		
Rise/Fall time	20ns~1.6ks (10% ~ 90%,typical)		
Duty Cycle	0.1%Resolution		
Overshoot	<5%		
Jitter(pk-pk)	500ps + 0.001% of period		



Specifications	Arbitrary
Waveform length	16k points
Vertical resolution	14bits
Sample rate	125MSa/s
Min. Rise/Fall time	8ns(typical)
Jitter(pk-pk)	8ns(typical)
Storage in non-volatile RAM memory	10 waveforms (10 in total)
Output Specification	
Amplitude	2mVpp~10Vpp(50Ω,≤10MHz) 2mVpp~5Vpp(50Ω,>10MHz)
Vertical accuracy	±(1mVpp +0.3dB of setting value) (100 kHz sine)
Amplitude flatness	±0.3 dB (compared to 100 kHz sine,5Vpp)
Impedance	50Ω
Protection	short-circuit protection
DC Offset	
Range(DC)	±5V(50Ω); ±10V(High-Z)
Offset accuracy	±(setting offset value *1%+3mV)
AM Modulation	
Carrier	Sine, Square, Ramp, Arbitrary(except DC)
Modulation waveform	Sine, Square, Ramp, Noise, Arbitrary (2mHz ~ 20kHz)
Modulation depth	0% ~ 120%
DSB-AM Modulation	
Carrier	Sine, Square, Ramp, Arbitrary(except DC)
Modulation waveform	Sine, Square, Ramp, Noise, Arbitrary (2mHz ~ 20kHz)
Modulation depth	0% ~ 120%
FM Modulation(CH1/CH2)	
Carrier	Sine, Square, Ramp, Arbitrary(except DC)
Modulation waveform	Sine, Square, Ramp, Noise, Arbitrary (2mHz ~ 20kHz)
Frequency deviation	0 ~ 0.5*bandwidth 1mHz resolution
PM Modulation(CH1/CH2)	
Carrier	Sine, Square, Ramp, Arbitrary(except DC)
Modulation waveform	Sine, Square, Ramp, Noise, Arbitrary (2mHz ~ 20kHz)
Phase Deviation	0~360° ,0.1°Resolution
FSK Modulation(CH1/CH2)	
Carrier	Sine, Square, Ramp, Arbitrary(except DC)
Modulation waveform	50% duty-cycle square waveform(2mHz~50kHz)
ASK Modulation(CH1/CH2)	
Carrier	Sine, Square, Ramp, Arbitrary(except DC)
Modulation waveform	50% duty-cycle square waveform(2mHz~50kHz)
PWM Modulation(CH1/CH2)	
Frequency	500μHz~20kHz
Modulation waveform	Sine, Square, Ramp, Arbitrary(except DC)
Sweep	
Carrier	Sine, Square, Ramp, Arbitrary(except DC)
Type	linear/logarithmic
Direction	Up/down
Sweep time	1ms~500s
Trigger source	Manual, external, internal
Burst	
Waveform	Sine, Square, Ramp, Pulse, Arbitrary(except DC)
Type	Count(1~50,000 periods),infinite, Gated
Start/Stop phrase	0°~360°
Internal period	1μs~500s
Gated source	External trigger
Trigger source	Manual, External or Internal



Specifications	Trigger Input	
	Input Level	TTL compatible
	Slope	Up or down
	Pulse width	>100ns
	Input impedance	>5kΩ,DC coupling
	SYNC Output	
Voltage level	TTL compatible	
Pulse width	>50ns	
Output impedance	50Ω(typical)	
Max. frequency	2MHz	
Interface		
Standard Interface	USB Device, USB Host	

General Specification	Display type	3.5inch'TFT-LCD
	Resolution	320×RGB×240
	Color depth	24bit
	Contrast Ratio	350:1(typical)
	Dimension	229(W)mm×105(H)mm×281(D)mm
	Weight	N.W: 2.6kg; G.W: 3.4kg