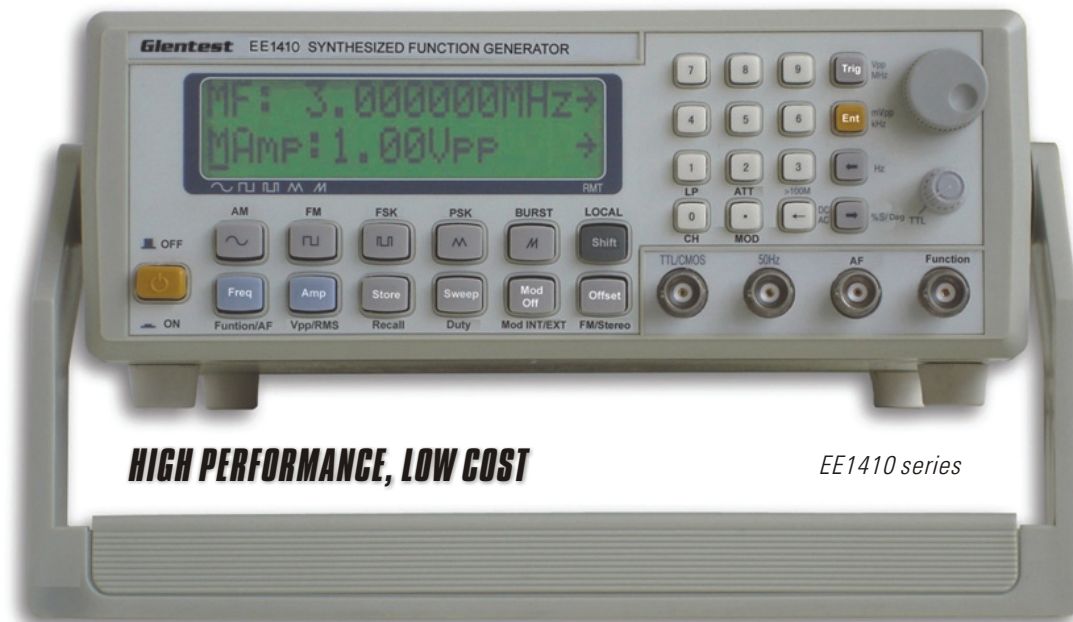


EE1410 SERIES DDS FUNCTION GENERATOR



HIGH PERFORMANCE, LOW COST

EE1410 series

Features:

- DDS technology used, more accurate output
- LSI EPLD waveform management, more than 30 waveforms available, including sine, square, pulse, triangle, ramp, TTL; AM, FM, FSK, BPSK modulation, BURST, sweep signal, etc.
- Low sine wave distortion, below 0.1%
- Independent front panel TTL/CMOS level adjustable output
- Store/recall function, up to 10 sets of memory by panel setting, nonvolatile memory
- Various optional function for selection, including: 50Hz output, AC/DC DVM, audio signal output, up to 1.5G frequency counter, etc.
- Convenient operation with numerical keypad and electronic rotary encoder input
- 16 character/two line dot-matrix LCD display with backlight
- RS232 or GP-IB interface (optional)
- Reliable performance with low cost, ideal for education, laboratory, and other general test

Specifications

EE1410A / EE1410B / EE1410C / EE1410D / EE1410E / EE1410F		(continued)	
MAIN OUTPUT	Output Waveforms	Sine, square, triangle, sawtooth, pulse, etc.	
	Amplitude	1mVpp~10Vpp (50 Ohm load, $f \leq 10\text{MHz}$)	
		1mVpp~3Vpp (50 Ohm load, $10\text{MHz} < f < 30\text{MHz}$)	
		2mVpp~20Vpp (open circuit, $f \leq 10\text{MHz}$)	
		2mVpp~6Vpp (open circuit, $10\text{MHz} < f < 30\text{MHz}$)	
	Amplitude Resolution	1mVpp	
	Impedance	50 Ohm +/-5%	
Attenuator	Automatic, min. output level 2mVpp		
DC Offset	+/-10V (DC+/-AC peak, open circuit),		
	+/-5V (DC+/-AC peak, 50 Ohm load)		
FREQUENCY	Frequency Range	Sine wave:	
		0.01Hz~3MHz (EE1410A), 0.01Hz~6MHz (EE1410B),	
		0.01Hz~10MHz (EE1410C), 0.01Hz~30MHz (EE1410D),	
		0.01Hz~40MHz (EE1410E), 0.01Hz~50MHz (EE1410F)	
	Square, pulse, TTL/CMOS: 0.01Hz~10MHz		
	Triangle, ramp: 0.01Hz~100kHz		
	Resolution	10mHz	
Indication Accuracy	+/-25ppm(normal temp.) or +/-1mHz		
WAVEFORM	Amplitude Resolution	1mVpp	
	Waveform Length	8~16000 dots	
	Waveform Accuracy	12 bits	
	Sampling Rate	300MSa/s	
	Sine Wave	Harmonic distortion: $\leq 50\text{dBc}$ ($< 1\text{MHz}$, $\geq 10\text{Vpp}$)	
		THD: 0.1% ($< 100\text{kHz}$, $\geq 10\text{Vpp}$)	
	Square Wave	Rise/fall time: $\leq 30\text{ns}$	
		Duty cycle: 50%	
	Pulse	Duty cycle: 10%~90% adjustable ($< 1\text{MHz}$)	
		better than +/-10% ($< 3\text{MHz}$, 20Vpp)	
Triangle	Linearity: $\geq 99\%$ ($\leq 50\text{kHz}$)		
	$\geq 98\%$ ($> 50\text{kHz}$)		
CMOS Output	Level: 3Vpp~15Vpp		
TTL Output	Standard TTL level		
MODULATION	AM	Int. modulation frequency: 1kHz +/-1Hz	
		Int. modulation depth: 0%~110% (10Vpp, $< 1\text{kHz}$ Mod. frequency)	
		0%~30% (10Vpp, $< 10\text{kHz}$ Mod. frequency)	
	FM	Ext. modulation: Sine wave, input 1.8Vpp	
		Ext. modulation frequency: 20Hz~10kHz	
FSK	Deviation: 0~10% adjustable		
	Ext. modulation: Sine wave, input 1.8Vpp		
BPSK	Ext. modulation frequency: $< 30\text{kHz}$		
	Ext. modulation: Sine wave, input 1.8Vpp		
Burst	Ext. modulation frequency: $< 30\text{kHz}$		
	Phase setting: 0°~360°		
Sweep	Internal arbitrary pulse frequency		
	Burst counts: 1~15 nos. output pulse		
COUNTER	Internal trigger: single by panel key		
	External trigger: single or continuous, external frequency must be more than 50 times lower than internal pulse frequency (duty cycle 50% +/-10%)		
POWER OUTPUT	Sweep mode: linear		
	Sweep range: full scale		
INTERFACE	Sweep time: 10ms~1s adjustable in 10ms step		
	Frequency Range		
GENERAL	Frequency Range		
	Sensitivity		
GENERAL	0.2Hz~100MHz, 500MHz/1GHz/1.5GHz (optional)		
	100mVrms (0.2Hz~5Hz), 50mVrms (5Hz~100MHz)		
GENERAL	$\geq 10\text{W}$ (40hm), sine wave, 20Hz~40kHz (optional)		
	RS232/485, GPIB (optional)		
GENERAL	Power Source		
	110V/220V +/-10%, 50/60Hz		
GENERAL	Power Consumption		
	50W max.		
GENERAL	Dimension		
	240 x 230 x 80mm		
GENERAL	Net Weight		
	3 Kgs		
GENERAL	Operating Temp.		
	0°C ~ 40°C		
GENERAL	Standard Accessories		
	Power cord (1 piece)		
		BNC to BNC leads (1 piece), BNC to alligator clip (1 piece)	