

DGE2035 / DGE2070 Palm Size Bench-type Waveform Generator



- + Up to 70MHz frequency output
- + Sampling rate: 500MSa/s
- + 14 bits (1μHz) vertical resolution
- + Waveform length at 8K points
- + Comprehensive waveform output :
5 basic waveforms, and 150 built-in arbitrary waveforms
- + Multi-type modulation available in AM, FM, PM, FSK, Sweep and Burst
- + SCPI and LabVIEW supported
- + LCD in 3.6 inch, 480 x 260 pixels

Performance Specifications

	DGE2035	DGE2070
Channel	2	
Frequency Output	35MHz	70MHz
Sampling Rate	500MSa/s	
Vertical Resolution	14 bits	

Waveform

Standard Waveform	sine, square, pulse, ramp, noise	
Arbitrary Waveform	exponential rise, exponential fall, sin(x)/x, step wave, and others, total 150 built-in waveforms	

Frequency (resolution @ 1μHz)

Sine	1μHz - 35MHz	1μHz - 70MHz
Square	1μHz - 15MHz	1μHz - 20MHz
Pulse	1μHz - 15MHz	1μHz - 20MHz
Ramp	1μHz - 1MHz	1μHz - 2MHz
Noise	20MHz (-3dB, typical)	
Arbitrary Waveform	1μHz - 10MHz	

Sine Wave Spectrum Purity

Harmonic Distortion (typical (0dB))	DC - 1MHz: <-65dBc 1MHz - 35MHz: <-60dBc	DC - 1MHz: <-65dBc 1MHz - 35MHz: <-60dBc 30MHz - 70MHz: <-50dBc
Total Harmonic Distortion	< 0.2%, 10 Hz to 20 kHz, 1 Vpp	
Spurious (non-harmonic) (typical (0dB))	≤10MHz: <-70dBc >10MHz: <-70dBc + 6dB/ octave band	
Phase Noise (typical (0 dBm, 10 kHz deviation))	typical (0dBm, 10kHz offset) 10MHz: -110dBc/Hz	

Performance Specifications

Square

Rise / Fall Time	<15ns	
Overshoot	< 2%	
Duty Cycle	50.0% (fixed)	
Jitter (rms)	200ps + 30ppm	

Pulse

Period	66.667ns - 1000ks	50ns - 1000ks
Pulse Width	≥24ns	
Rise / Fall Time	≥15ns	
Overshoot	< 3%	
Jitter (rms)	200ps + 30ppm	

Ramp

Linearity	≤1% of peak output (typical, 1kHz, 1 Vpp, 50% symmetry)	
Symmetry	0% - 100%	

Arbitrary

Waveform Length	2 points - 8K points	
Sampling Rate	125Ma/s	300Ma/s

Amplitude

into 50Ω Load	1mVpp - 10Vpp (≤10MHz) 1mVpp - 5Vpp (≤70MHz)	
DC Offset Range (AD+DC)	±(10 Vpk - Amplitude Vpp/2) high resistance ±(5 Vpk - Amplitude Vpp/2) 50 Ω	
DC Offset Resolution	1mV or 4 digits	
Load Impedance	50Ω (typical)	
DC Offset Accuracy	±(1 % of setting + 1 mV + amplitude Vpp x 0.5%)	

Modulation

Type	AM, FM, PM, FSK, Sweep and Burst
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Sweep

Trigger Source	internal, external
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Mechanical

Display	LCD, in 3.6 inch, 480 x 260 pixels
Communication Interface	USB Host
Dimensions (W/H/D)	200 x 74.5 x 68.5 (mm)
Device Weight	0.45 kg

Accessories



Power Cord



Adapter



Manual



USB Cable



BNC Cable



BNC to Alligator Clip