

2-CH
 frequency output: 35MHz / 70MHz
 Sample rate: 125MSa/s / 300MSa/s

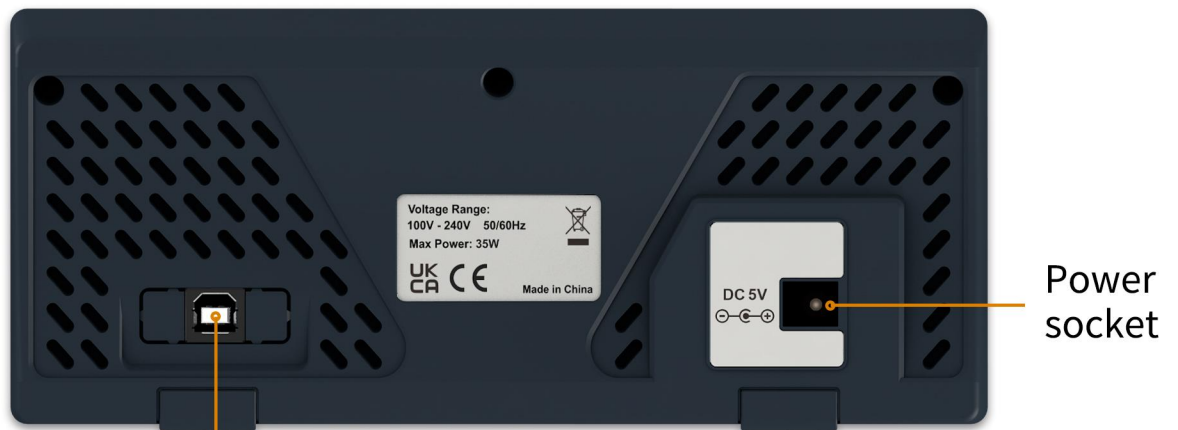
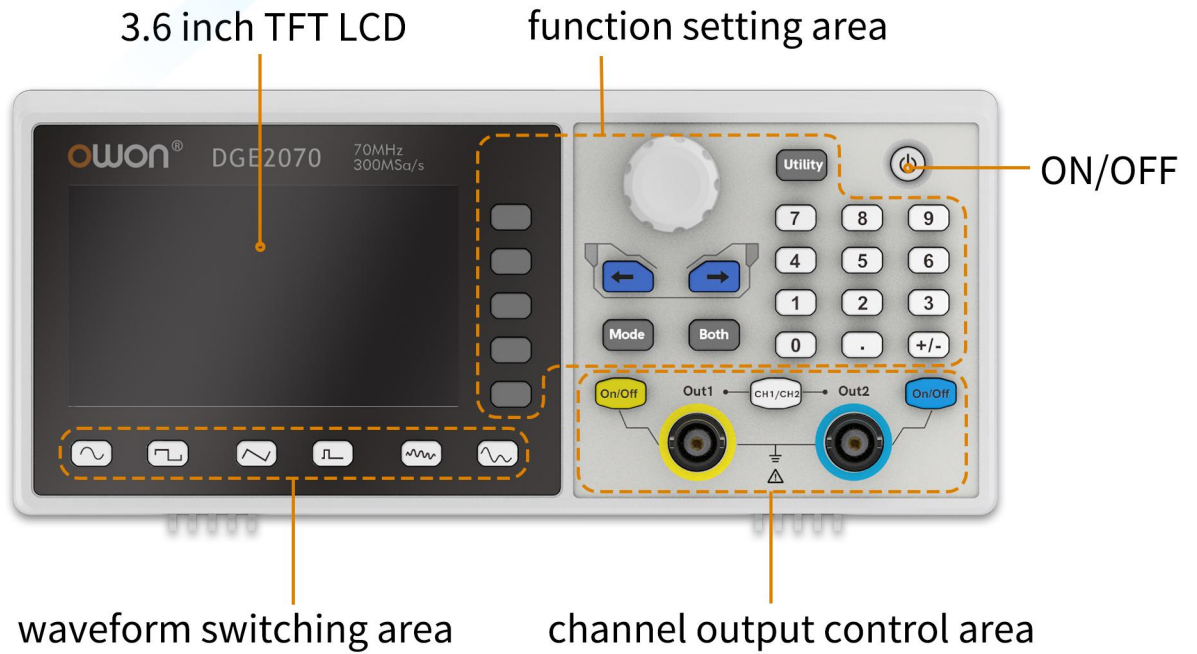


DGE2000

WAVEFORM GENERATOR

- Up to 70MHz frequency output, Max 300MSa/s sample rate
- Vertical Resolution :14 bits, max 8K Arb waveform length
- Comprehensive waveform output :
5 basic waveforms, and 150 built-in arbitrary waveforms
- Comprehensive modulation functions :
AM, FM, PM, FSK, Sweep, Burst, etc.
- SCPI, and LabVIEW supported
- 3.6 inch TFT LCD, all settings can be fully displayed
- Ultra-thin body, easy to operate

APPEARANCE DIMENSION



Dimension (W x H x D):
200mm x 86.5mm x 74.5mm



3.6 inch LCD Display





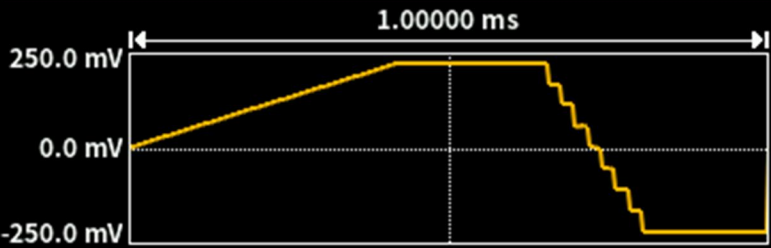
DGE2000 series adopt 3.6 inch TFT color LCD display, each channel output waveform status and menu settings can be fully displayed on the screen. With convenient shortcut key, it makes man-machine interaction more convenient and effectively improve working efficiency.

FUNCTION INTRODUCTION

CH1	CH2
	
Freq 1.000 00 kHz	Freq 1.000 00 kHz
Ampl 6.752 Vpp	Ampl 1.000 Vpp
Offset 0 mV	Offset 0 mV
Phase 0°	Phase 0°

Standard equivalent performance dual channel.

CH1 OFF High Z  





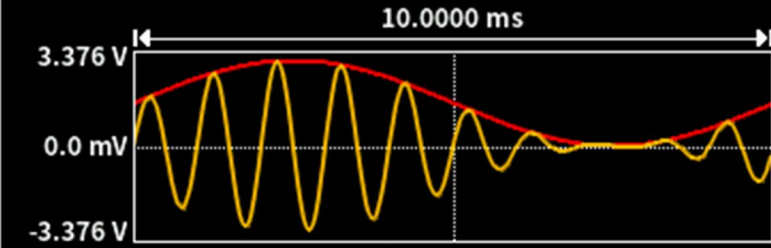
250.0 mV
1.00000 ms
0.0 mV
-250.0 mV

Butterworth	Combin	CPulse
CWPulse	RoundsHalf	BandLimited
BlaseiWave	Chebyshev1	Chebyshev2
DampedOsc	DualTone	Gamma

Arb
Ok
Cancel

with more than 150 kinds of built-in arbitrary waveforms.

CH1 OFF High Z AM  





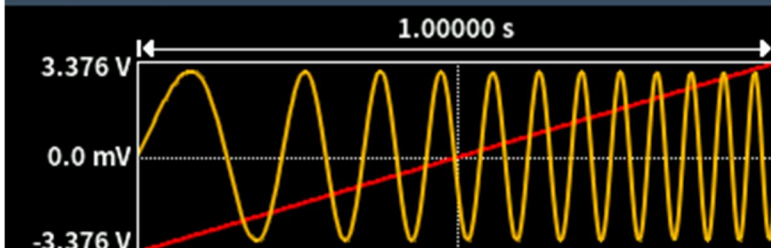
3.376 V
10.0000 ms
0.0 mV
-3.376 V

Shape	Sine
Frequency	100.000 0 Hz
Depth	100 %

Mode
Sweep
AM
FM
PM
FSK

support AM, FM, PM, FSK modulation mode.

CH1 OFF High Z Sweep  



3.376 V
1.00000 s
0.0 mV
-3.376 V

Type	Linear
Sweep Time	1.000 000 s
Start Freq	100.000 0 Hz
Stop Freq	1.000 000 kHz

Sweep
Linear
Log
Sweep Time
Start Freq
Centre Freq
Stop Freq
Freq Span
Source
Internal

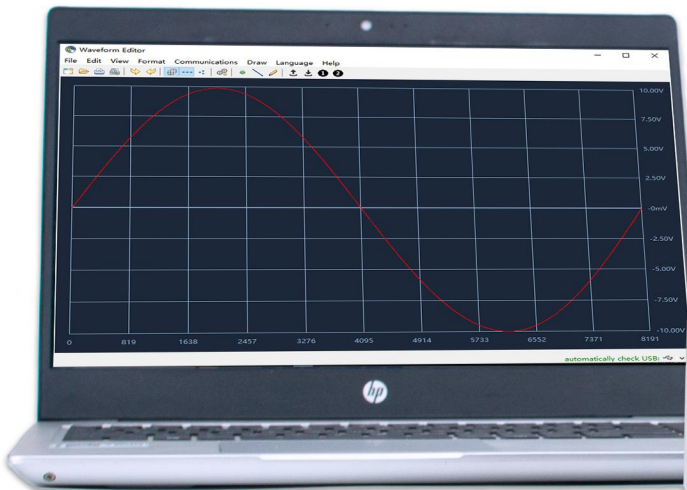
Sweep function



Burst function

/USER2			Files
Name	Size		Call Out
USER0	16.00kB		
USER1	16.00kB		
USER2	16.00kB		
USER3	0.00B		
USER4	0.00B		
USER5	0.00B		
USER6	0.00B		Back

16 non-volatile digital arbitrary waveform storage functions.



Support PC remote control

PRODUCT SPECIFICATIONS

Model	DGE2035	DGE2070
Channel	2	
Frequency Output	35MHz	70MHz
Sample Rate	125MSa/s	300MSa/s
Vertical Resolution	14 bits	

Waveform

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

Frequency (resolution 1 μ Hz)

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

Sine Wave Spectrum Purity

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

Square

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

Pulse

Cycle	66.667ns - 1000ks	50ns - 1000ks
Pulse Width	\geq 24ns	
Leading / Trailing Edge Time	\geq 15ns	
Jitter (rms)	200ps + 30ppm	

Ramp

Linearity	\leq 1% of peak output (typical, 1kHz, 1 Vpp, 50% symmetry)	
Symmetry	0% to 100%	

Arbitrary

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

Amplitude

into 50Ω load	1mVpp - 10Vpp ($\leq 10\text{MHz}$) 1mVpp - 5Vpp ($\leq 70\text{MHz}$)	
into open circuit or high-Z	2mVpp - 20Vpp ($\leq 10\text{MHz}$) 2mVpp - 10Vpp ($\leq 70\text{MHz}$)	
Resolution	1mV or 4digits	
DC Offset	Range (50Ω)	$\pm(5 \text{ Vpk} - \text{Amplitude Vpp}/2)$
	Range (high-Z, open circuit)	$\pm(10 \text{ Vpk} - \text{Amplitude Vpp}/2)$
	Accuracy	$\pm(1 \% \text{ of } \text{setting} + 1 \text{ mV} + \text{amplitude Vpp} * 0.5\%)$
	Resolution	1mV or 4digits
Load Impedance	50Ω (typical)	

Modulation

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

Trigger Source	internal, manual
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Input / Output

Display	3.6- inch TFT LCD with resolution 800 x 600
Communication Interface	USB Device

Mechanical specifications

Dimension (W×H×D)	200mm x 86.5mm x 74.5mm
Weight (without package)	0.45kg

ACCESSORIES AND PACKAGING

- 1 Host Machine
- 2 BNC to Alligator Clip
- 3 Q9 Cable
- 4 USB Cable
- 5 USB to DC Cord
- 6 Power Adapter
- 7 Quick Guide
- 8 Packaging

