Function Generator

2015H/2040H/2060H   Signal Generator
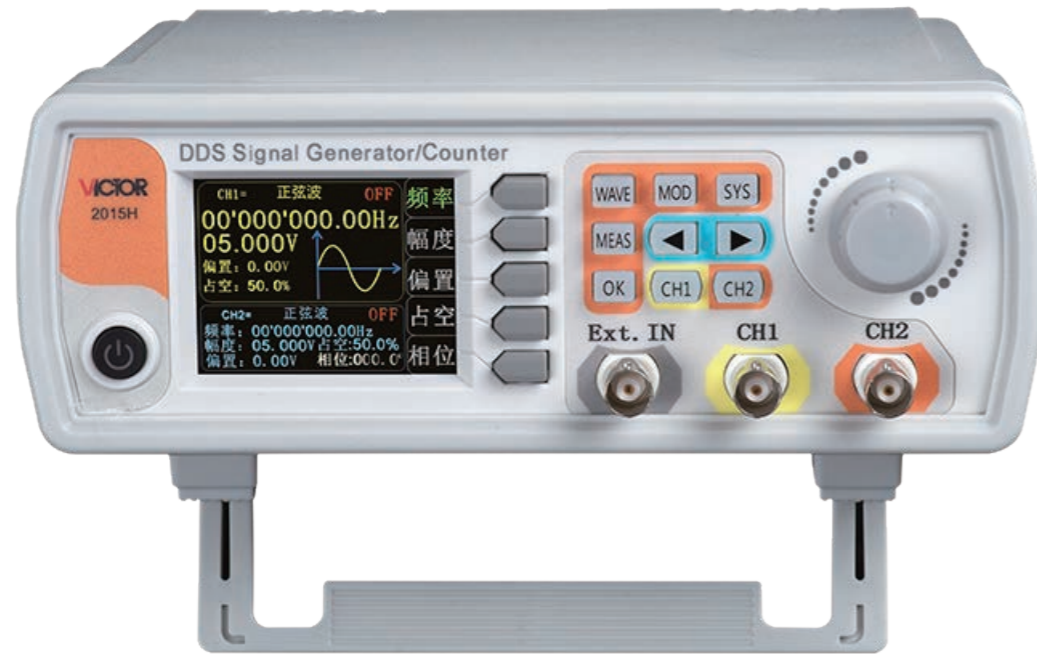
Technical data

	2015H	2040H	2060H
Sine wave frequency range	0~15MHz	0~40MHz	0~60MHz
Square wave frequency range	0~15MHz	0~25MHz	0~25MHz
Triangle wave frequency range			
Pulse wave frequency range	0~6MHz	0~6MHz	0~6MHz
TTL digital wave frequency range			
Arbitrary frequency range			
Pulse width adjustment range	100nS~4000S	40nS~4000S	25nS~4000S
Square wave rise time	≤25ns	≤10ns	≤10ns
Minimum frequency resolution	0.01uHz（0.00000001Hz）		
Frequency accuracy	±20ppm		
Frequency stability	±1ppm/3hours		
Waveform type	Sine、Square、pulse (adjustable duty cycle, precise adjustment of pulse width andperiod), triangular wave, partial sine wave, CMOS wave, DC level (set DC amplitude by adjusting offset), half wave, full Wave, positive staircase wave, anti-ladder wave, noise wave, exponential rise, exponential drop, multisonic wave, Symplectic pulse and Lorenz pulseand 60arbitrary waveforms		
Wave length	2048 points		
Waveformsampling rate	266MSa/s		
Waveform vertical resolution	14-bits		
Sine wave	Harmonic Suppression	≥45dBc(<1MHz); ≥40dBc(1MHz~20MHz)	
	Total harmonic distortion	<0.8%(20Hz~20kHz,0dBm)	
Squarewave and pulse wave	Overshoot	≤5%	
Pulse wave	Duty cycle adjustment range	0.1%~99.9%	

Sine wave amplitude range	Frequency ≤ 10MHz	10MHz ≤ Frequency ≤ 30MHz	30MHz ≤ Frequency
	2mVpp~20Vpp	2mVpp~10Vpp	2mVpp~5Vpp
Square wave、Triangle wave amplitude range	Frequency ≤ 10MHz	10MHz ≤Frequency ≤25MHz	
	2mVpp~20Vpp	2mVpp~5Vpp	
Amplitude resolution	1mV		
Amplitude stability	±0.5%/5 hours		
Flatness of amplitude	±5%(<10MHz); ±10%(>10MHz)		
Output impedance	50Ω±10% (typical)		
Protection	All signal outputs can work within 60 when the load is short-circuited.		
Offset adjustment range	Output amplitude > 2V	0.2V <Output Range ≤ 2V	0<Output amplitude ≤0.2V
	-9.99V~9.99V	-2.5V~2.5V	-0.25V~0.25V
Offset resolution	0.01 V		
Phase adjustment range	0~359.9°		
Phase resolution	0.1°		
Low level	<0.3V		
High level	1V~10V		
Level rise/fall time	≤20ns		
Frequency meter function	Frequency measurement range	1Hz~100MHz	
	Measurement accuracy	Gate time 0.01S~10s continuous adjustment	
Counter function	Counting range	0-4294967295	
	Coupling method	DC and AC coupling methods	
	Counting method	Manually	
Input signal voltage range	2Vpp~20Vpp		
Pulse width measurement	0.01us resolution, maximum measurable 20s		
Period measurement	0.01us resolution, maximum measurable 20s		
Sweep channel	CH1 or CH2		
Sweep type	Linear sweep, logarithmic sweep		
Sweep time	0.1s~999.9s		
Setting range	Any setting between the maximum output frequency of the corresponding model of the starting point (0.01Hz) and the end point		
Sweep direction	Forward, reverse and round trip		
Number of pulses	1-1048575		
Burst mode	Manual burst, CH2 burst, external burst (AC), external burst (DC)		
Display	Display type	2.4 inch TFT color LCD display	
Store and load	Quantity	100	
	Position	00 to 99 (00 memory location parameter is loaded by default as power on)	
Arbitrary wave	Quantity	1 to 60 total 60 groups (15 groups by default as power on)	
Interface	Interface mode	USB to serial interface	
	Extension interface	With TTL level mode serial interface for user secondary development	
	Communication speed	Adopt standard 115200bps	
	Protocol	Using the command line, the protocol is made public	
Power supply	Voltage range	DC5V±0.5V	
Manufacturing technology	Surface mount technology, large-scale integrated circuits, high reliability, long service life		
Prompt tone	Users can turn on or off by setting program		
Operating characteristics	All key operations, knob continuous adjustment		
Environmental conditions	Temperature: 0~40 oC Humidity: <80%		