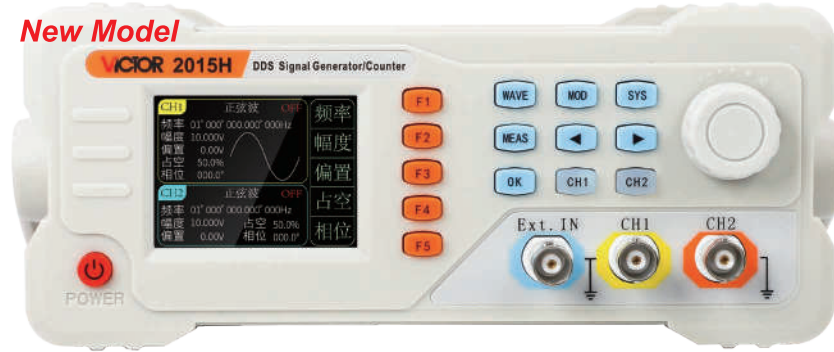


2015H/2040H/2060H

New Model



### Technical data

Model	2015H	2040H	2060H
<b>Sine wave</b>	1μHz~20MHz	1μHz~40MHz	1μHz~60MHz
<b>Square wave</b>	1μHz~15MHz	1μHz~15MHz	1μHz~15MHz
<b>Triangle wave</b>	1μHz~15MHz	1μHz~15MHz	1μHz~15MHz
<b>Pulse wave</b>	100μHz~6MHz	100μHz~6MHz	100μHz~6MHz
<b>Arbitrary</b>	1μHz~6MHz	1μHz~6MHz	1μHz~6MHz
<b>Frequency resolution</b>	1uHz		
<b>Frequency accuracy</b>	±20ppm		
<b>Frequency stability</b>	±1ppm/3hours		
<b>Waveform characteristics</b>			
<b>Waveform type</b>	Sine, Square, triangular wave, pulse, noise, arbitrary wave (including DC).		
<b>Wave length</b>	8192 points		
<b>Waveform sampling rate</b>	200MSa/s		
<b>Waveform vertical resolution</b>	13-bits		
<b>Sine wave characteristics</b>			
<b>Sine wave</b>	Harmonic Suppression	≥45dBc(<1MHz); ≥40dBc(1MHz~20MHz)	
	Total harmonic distortion	<0.8%(20Hz~20kHz,0dBm)	
<b>Square wave signal characteristics</b>			
<b>Square wave</b>	Rise/Fall time	<20ns	
	Overshoot	<5%	
	Duty cycle range	Frequency < 100 KHz: 1% ~ 99%; 100kHz frequency <5MHz: 20% ~ 80%; 5MHz frequency: 40% ~ 60%(0.1% resolution)	
<b>Pulse wave characteristics</b>			
<b>Pulse wave</b>	Pulse width	Minimum 20ns; 1 ns resolution.	
	Edge jumping time	Minimum 20ns	
	Overshoot	<5%..	
	Shaking	6ns+0.1% period cycle	
<b>Sawtooth wave characteristics</b>			
<b>Sawtooth wave</b>	Linearity	≥98%(0.01Hz~10kHz)	
	Symmetry	0.0 ~ 100.0%(resolution 0.1%)	
<b>Trigger Input</b>			
<b>Signal Range</b>	2Vpp~20Vpp		
<b>Coupling</b>	AC or DC		
<b>Pulse Width</b>	>100ns		
<b>Reaction Time</b>	<500ns(Burst) <10μs(Sweep)		
<b>Modulation Input</b>			
<b>Impedance</b>	1MΩ		
<b>Signal Range</b>	±2.5V ac+dc		

### Output characteristics

	2015H	2040H	2060H
<b>Amplitude range</b>	Frequency <10MHz	10MHz ≤ Frequency ≤ 30MHz	30MHz ≤ Frequency
	2mVpp~20Vpp	2mVpp~10Vpp	2mVpp~5Vpp
<b>Amplitude resolution</b>	1mV		
<b>Amplitude accuracy</b>	1% +2mVpp of set value (1kHz sine wave, 0 offset, >10mVpp)		
<b>Amplitude flatness (Relative to 1k sine wave, 1Vpp)</b>	±0.4dB <10MHz ; ±1.0dB ≥10MHz		
<b>Output impedance</b>	50Ω±10% (typical)		
<b>Protection</b>	All signal outputs can work within 60 when the load is short-circuited.		
<b>Offset</b>			
<b>Output range</b>	Output amplitude > 0.1V	2mV < Output amplitude ≤ 0.1V	
	±10Vpk, ac + dc	±0.250Vpk, ac + dc	
<b>Offset resolution</b>	1mV		
<b>Phase characteristics</b>			
<b>Phase adjustment range</b>	0~359.9°		
<b>Phase resolution</b>	0.1°		
<b>External measurement function</b>			
<b>Frequency meter function</b>	Frequency measurement range 1Hz~100MHz		
	Gate time	0.01S~10s continuous adjustment	
<b>Counter function</b>	Counting range 0~4294967295		
	Counting method	Manually	
<b>Input signal voltage range</b>	2Vpp~20Vpp		
<b>Coupling</b>	DC or AC		
<b>Pulse width measurement</b>	1ns resolution, maximum measurable 20s		
<b>Period measurement</b>	1ns us resolution, maximum measurable 20s		

AM Modulation		FM Modulation	
<b>Output channel</b>	CH1 or CH2	<b>Output Channel</b>	CH1 or CH2
<b>Signal Carrier</b>	Sine, square, sawtooth, pulse and arbitrary waveforms (excluding DC)	<b>Carrier Wave</b>	Sine, square, sawtooth, pulse and arbitrary waveforms (excluding DC)
<b>Source</b>	Internal/External VCO(external is optional)	<b>Source</b>	Internal/External(external is optional)
<b>Modulation Wave</b>	Sine, square, triangle and ramp	<b>Modulation Wave</b>	Sine, square, triangle and ramp
<b>Modulation Frequency</b>	2mHz~20kHz	<b>Modulation Frequency</b>	2mHz~20kHz
<b>Modulation Depth</b>	0%~120%	<b>Frequency Offset</b>	0~Maximum carrier frequency
<b>PM Modulation</b>		<b>ASK Modulation</b>	
<b>Output Channel</b>	CH1 or CH2	<b>Output Channel</b>	CH1 or CH2
<b>Carrier Wave</b>	Sine, square, sawtooth, pulse and arbitrary waveforms (excluding DC)	<b>Carrier Wave</b>	Sine, square, sawtooth, pulse and arbitrary waveforms (excluding DC)
<b>Source</b>	Internal/External(external is optional)	<b>Source</b>	Internal/External
<b>Modulation Wave</b>	Sine, square, triangle and ramp	<b>Modulation Wave</b>	Square wave of 50% duty ratio
<b>Modulation Frequency</b>	2mHz~20kHz	<b>Keying Frequency</b>	2mHz~1MHz
<b>Phase Offset</b>	0°~360°	<b>Modulation Amplitude</b>	0~Carrier Amplitude
<b>FSK Modulation</b>		<b>PSK Modulation</b>	
<b>Output Channel</b>	CH1 or CH2	<b>Output Channel</b>	CH1 or CH2
<b>Carrier Wave</b>	Sine, square, sawtooth, pulse and arbitrary waveforms (excluding DC)	<b>Carrier Wave</b>	Sine, square, sawtooth, pulse and arbitrary waveforms (excluding DC)
<b>Source</b>	Internal/External	<b>Source</b>	Internal/External
<b>Modulation Wave</b>	Square wave of 50% duty ratio	<b>Modulation Wave</b>	Square wave of 50% duty ratio
<b>Keying Frequency</b>	2mHz~1MHz	<b>Keying Frequency</b>	2mHz~1MHz
<b>Hop Frequency</b>	Carrier frequency range	<b>Modulation Phase</b>	0°~360°

### General Technical Specifications

<b>Power Supply</b>	
<b>Supply Voltage</b>	AC 110~240V, 50~60Hz
<b>Power Consumption</b>	<15W
<b>Display</b>	
<b>Types</b>	2.4-inch TFT LCD screen
<b>Resolution</b>	320×240
<b>Color</b>	16M color
<b>Environment</b>	
<b>Temperature Range</b>	Operation: 10°C~+40°C Non-operation: -10°C~+60°C
<b>Cooling Methods</b>	Natural cooling
<b>Humidity Range</b>	Below +35°C: ≤90% relative humidity, +B14035°C ~ +40°C: ≤60% relative humidity
<b>Interface</b>	USB Device
<b>Frequency Sweep</b>	
<b>Output Channel</b>	CH1 or CH2
<b>Types</b>	Linearity/Logarithm
<b>Sweep Frequency Time</b>	1ms ~ 999.999s
<b>Start/Stop Frequency</b>	Arbitrary set
<b>Sweep Direction</b>	Forward, Reverse, Backward
<b>Trigger Source</b>	Manual operating, internal, external
<b>Frequency Sweep</b>	
<b>Output Channel</b>	CH1 or CH2
<b>Carrier Wave</b>	Sine, square, sawtooth, pulse, noise and arbitrary waveforms (excluding DC)
<b>Pulse Count</b>	1~1048575 or infinite, gated
<b>Start/Stop Phase</b>	0~360°
<b>Internal Period</b>	1μs~500s
<b>Gating Source</b>	External
<b>Trigger Source</b>	Internal, external, manual operating