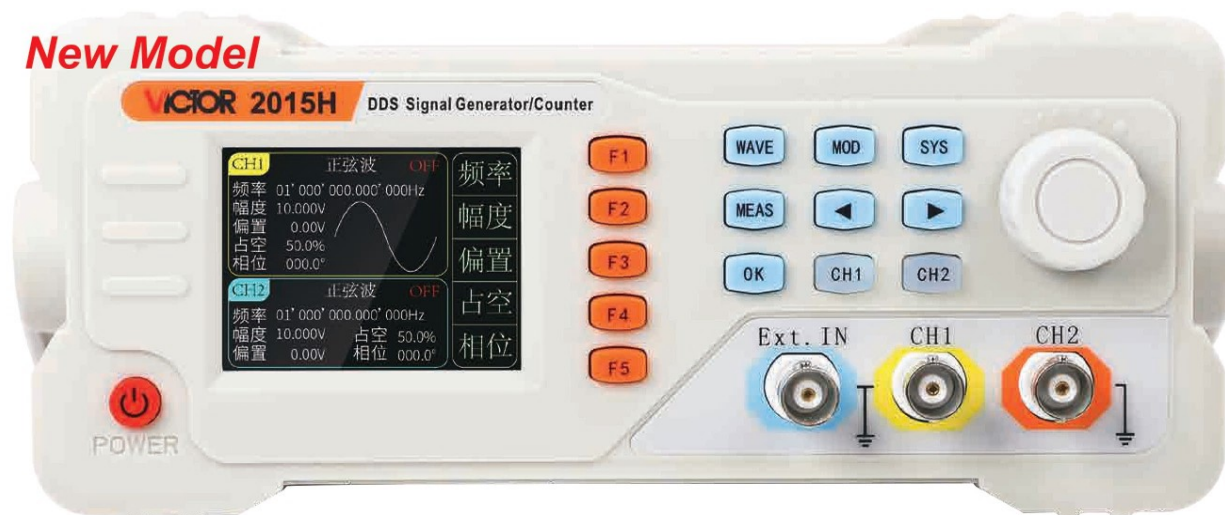


2015H/2040H/2060H

New Model



Technical data

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

Output characteristics

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

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

Frequency Sweep	
Output Channel	CH1 or CH2
Types	Linearity/Logarithm
Sweep Frequency Time	1ms ~ 999.999s
Start/Stop Frequency	Arbitrary set
Sweep Direction	Forward, Reverse, Backward
Trigger Source	Manual operating, internal, external
Frequency Sweep	
Output Channel	CH1 or CH2
Carrier Wave	Sine, square, sawtooth, pulse, noise and arbitrary waveforms (excluding DC)
Pulse Count	1~1048575 or infinite, gated
Start/Stop Phase	0~360°
Internal Period	1μs~500s
Gating Source	External
Trigger Source	Internal, external, manual operating

General Technical Specifications

Power Supply	
Supply Voltage	AC 110~240V, 50~60Hz
Power Consumption	<15W
Display	
Types	2.4-inch TFT LCD screen
Resolution	320×240
Color	16M color
Environment	
Temperature Range	Operation: 10°C~+40°C Non-operation: -10°C~+60°C
Cooling Methods	Natural cooling
Humidity Range	Below +35°C: ≤90% relative humidity, +B14035°C ~ +40°C: ≤60% relative humidity
Interface	USB Device