

# WaveStation Function/Arbitrary Waveform Generators



## Key Features

- High performance with 14-bit, 125 MS/s and 16 kpts
- 2 channels on all models
- Large 3.5" color display for easy waveform preview
- Over 40 built-in arbitrary waveforms
- Linear & Logarithmic sweeps and burst operation
- USB and GPIB connectivity
- Graphical waveform editing software for PC

A waveform generator must provide a large set of signal types and generation modes to cover a wide variety of applications. Some applications may require quick and easy access to basic waveforms while others may require advanced modulation techniques or the ability to import real world signals from an oscilloscope. The WaveStation Function/Arbitrary Waveform Generators meet the requirements ranging from basic function generation to advanced arbitrary waveform creation and are capable of generating signals up to 50 MHz. Each WaveStation model has 2 output channels a 3.5" display, intuitive front panel, and includes waveform editing software for the PC.

With over 40 built-in arbitrary waveforms plus the basic sine, square and noise functions and 2 output channels WaveStation provides the flexibility that engineers and technicians require. The ability to easily create and preview waveforms is just as important as the hardware performance of a waveform generator. WaveStation has a large 3.5" color display which provides a preview of each waveform along with various parameters, such as frequency, amplitude, offset, and phase on a single screen. Integrating

WaveStation with other test equipment is easy, with all the necessary I/O connections for synchronization as well as standard USB and GPIB interfaces for remote control and automation easily accessible.

Accompanying the WaveStation hardware is a PC software utility which simplifies waveform creation and editing. The software runs on an external PC and provides additional waveform creation capabilities for shaping and editing waveforms with mathematical operators, digital filters or by placing individual sample points. A flexible waveform drawing tool is built in allowing the user to create a freeform waveform sketch on the In addition, the software provides unique capability of importing waveforms captured on a LeCroy WaveAce oscilloscope, via USB, and recreating them on the WaveStation.

WaveStation meets the needs of today's engineers and technicians by providing strong features, such as, more channels per unit, large color display, extensive waveform library and various connectivity and synchronization capabilities.

# SPECIFICATIONS AND ORDERING INFORMATION

	WaveStation 2012	WaveStation 2022	WaveStation 2052
Bandwidth	10 MHz	25 MHz	50 MHz
Channels	2		
Waveforms	Sine, Square, Ramp, Pulse, Noise, 40+ Arbitrary Waveform Types		

## Waveform Characteristics

<b>Sine</b>			
Frequency Range	1 $\mu$ Hz - 10 MHz	1 $\mu$ Hz - 25 MHz	1 $\mu$ Hz - 50 MHz
<b>Square</b>			
Frequency Range	1 $\mu$ Hz - 10 MHz	1 $\mu$ Hz - 25 MHz	
Duty Cycle Range	20% - 80%	50%	
Rise/Fall Time	< 12 ns		
<b>Pulse</b>			
Frequency Range	500 $\mu$ Hz - 5 MHz		
Duty Cycle Range	0.1 % Resolution		
Rise/Fall Time	7 ns		
<b>Triangle/Ramp</b>			
Frequency Range	1 $\mu$ Hz - 300 kHz		
Ramp Symmetry	0% - 100%		
<b>Arbitrary Waveforms</b>			
Frequency Range	1 $\mu$ Hz - 5 MHz		
Waveform Length	16 kpts/Ch		
Vertical Resolution	14 bits		
Sample Rate	125 MS/s		
Min. Rise/Fall time	7 ns (typical)		

## Modulation, Sweep, Burst Capabilities

<b>Amplitude Modulation</b>			
Source	Internal/External		
Carrier	Sine, Square, Ramp, Arbitrary		
Modulation Depth	0% - 120%		
Modulating Waveform Sample Clock	3.90625 MHz		
<b>Frequency Modulation</b>			
Source	Internal/External		
Carrier	Sine, Square, Ramp, Arbitrary		
Resolution	10 $\mu$ Hz		
<b>Sweep</b>			
Type	Linear/Logarithmic		
Direction	Up/Down		
Sweep Time	1 ms - 500 s		
<b>Burst</b>			
Type	Count (1 - 50,000 Periods, Infinite, Gated)		
Start/Stop phrase	0° - +360°		
Internal Period	1 $\mu$ s - 500 s		
Gated Source	External Trigger		
Trigger Source	Manual, External or Internal		

## Channel Characteristics

Output Connector	BNC
Output Impedance	50 $\Omega$ , High Impedance

## Display

Characteristics	3.5 inch TFT-LCD, QVGA
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## Physical Characteristics

Dimensions (HWD)	105 mm x 229 mm x 281 mm
Weight	2.6 Kg

## Ordering Information

Product Description	Product Code
10 MHz, 2ch, 14bit, 125MS/s Function/Arbitrary Waveform Generator with 3.5" Display	WaveStation 2012
25 MHz, 2ch, 14bit, 125MS/s Function/Arbitrary Waveform Generator with 3.5" Display	WaveStation 2022
50 MHz, 2ch, 14bit, 125MS/s Function/Arbitrary Waveform Generator with 3.5" Display	WaveStation 2052



1-800-5-LeCroy  
www.lecroy.com

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