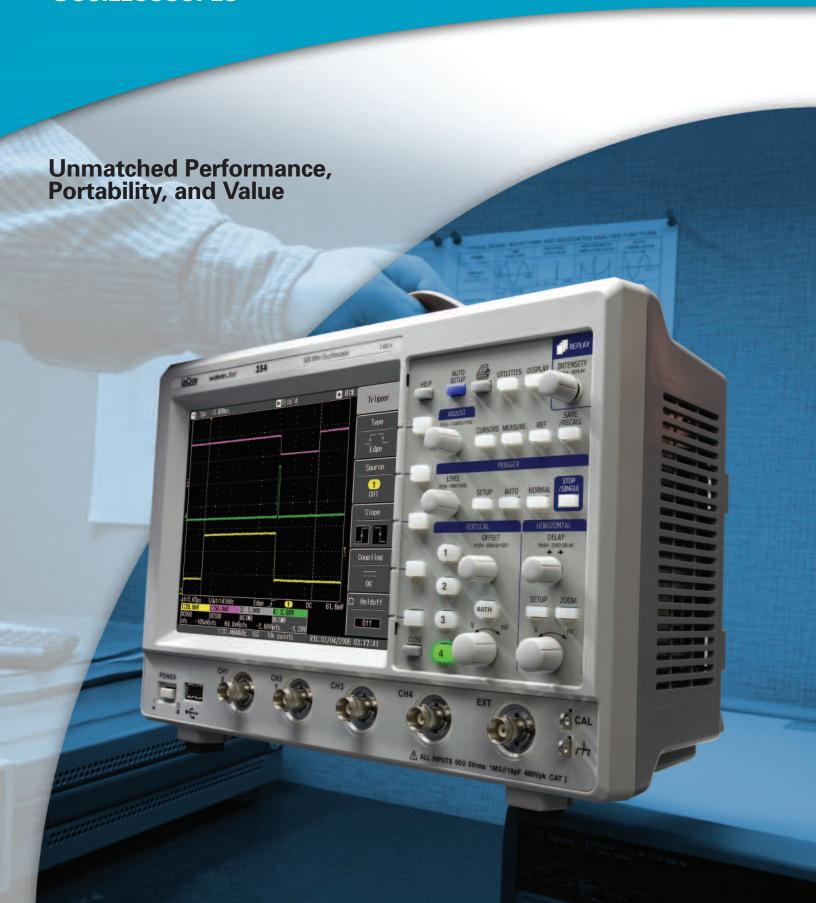
# **LeCroy**

## WaveJet™ 300 Series Oscilloscopes

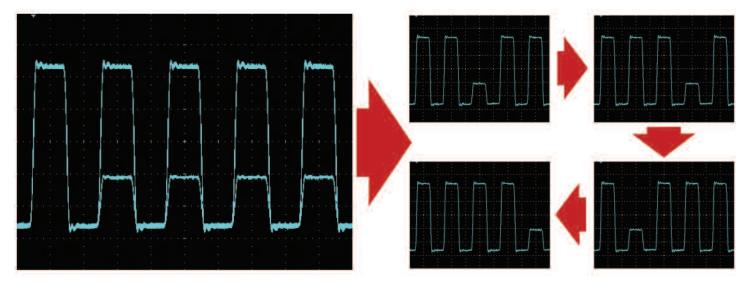


## **WAVEJET 300 SERIES**

## Unique Capabilities in a Low Bandwidth Oscilloscope

The WaveJet™ 300 Series features unmatched performance and debugging tools not usually found in low bandwidth portable oscilloscopes. Engineers can simplify and shorten their debugging process with the Replay feature

and long capture time not available in other oscilloscopes with bandwidths at 100 MHz. On top of great performance and capabilities the WaveJet is lightweight and portable, it is only 4" deep and features a large 7.5" color display.

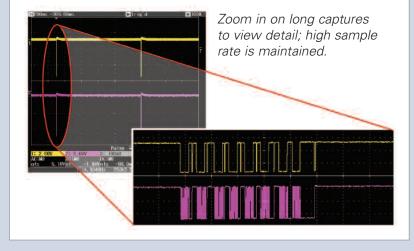


#### Replay

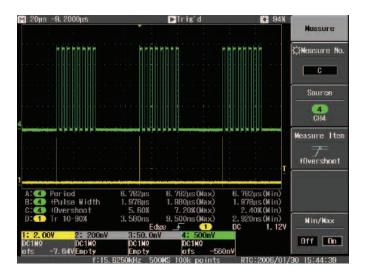
Many engineers find it important to see a fast updating display on the oscilloscope screen to ensure that they are capturing a lot of data and not missing any rare events. Other oscilloscopes show you those events briefly on screen before they fade away. But the WaveJet with Replay lets you see more. Replay allows you to look back in time at your waveform to view those rare events, such as runts or glitches, and display them in the order they occurred, providing you with unique insight to simplify debugging and troubleshooting.

#### **Long Capture**

Low bandwidth portable oscilloscopes often suffer from very short memory lengths, which prevents, you from using the oscilloscope to its full potential. The WaveJet eliminates the tradeoff between high sample rate and long capture time, by providing up to 200x the capture time, at 2 GS/s, compared to other oscilloscopes in its class. The long memory makes WaveJet the ideal oscilloscope for viewing a mix of low-frequency and high-frequency signals or low-speed signals with fast edges.

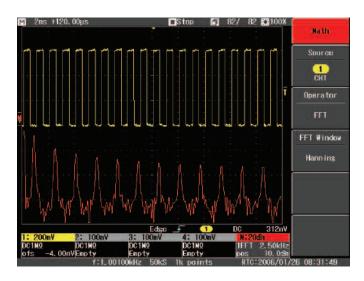


## **ALL THE TOOLS YOU NEED**



#### **Automatic Measurements**

Save time making measurements on your signals by using the 26 automatic measurement parameters. See your results color coded to the channels, and with minimum and maximum values displayed.



#### **Waveform Math**

The WaveJet provides math capabilities for additional analysis. Available math functions include sum, difference, product, and FFT. Measurements can then be made on the calculated waveforms.

## Oscilloscope Settings and Reference Waveforms

Save captured waveforms and WaveJet settings to internal memory or a USB memory device. Recall those settings at a later time to compare your testing results.

#### **Acquisition Modes**

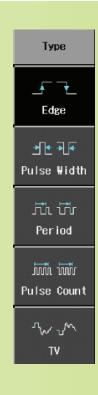
Peak detect and equivalent time acquisition modes offer flexibility in how you capture and measure your signals. The WaveJet can capture glitches as small as 1 ns with peak detect mode and can achieve a sample rate up to 100 GS/s with equivalent time mode.

#### **Frequency Counter**

Use the built in 6-digit frequency counter to simplify how you make measurements. The counter is always displayed and easy to read at a glance.

## **Triggering**

Along with edge triggering, additional triggering capabilities include Pulse Width, Period, Pulse Count, and TV triggers to help you capture the signals you need to see.



## WAVEJET 300 SERIES OSCILLOSCOPES

Intuitive User Interface for Easy Operation

The WaveJet features a streamlined and intuitive front panel, eliminating the learning curve associated with

many oscilloscopes. All the important horizontal,

vertical, and trigger settings are just one button

press away.

### 1. Display

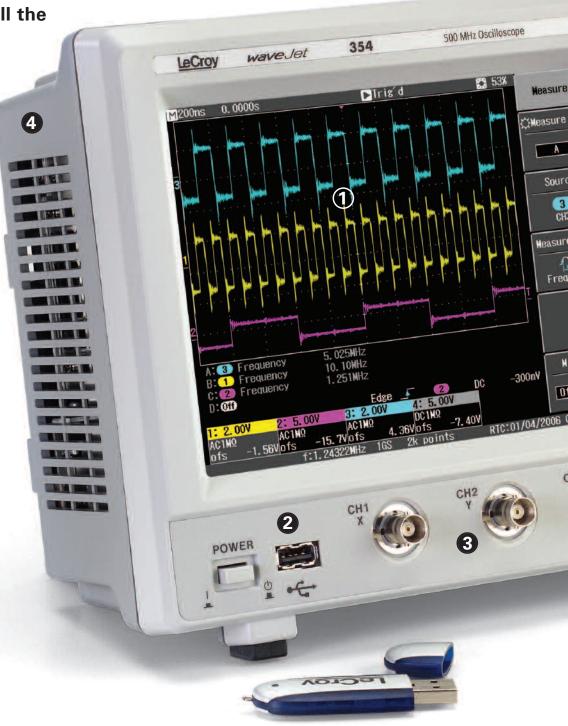
The 7.5" display allows you to easily view signal details. This large display allows room to display measurements and menus without cluttering the waveform grid.

## 2. Connectivity

Documenting your work is easy using the front mounted USB port on the WaveJet. Simply press the Print button on the front panel to quickly save screen images to your USB memory device.

## 3. Probe Sense Ring

Probe attenuation is automatically detected with the WaveJet's probe sense ring eliminating the need to manually select the attenuation factor.





#### 4. Portability

The small 4" footprint and light weight of the WaveJet means it is easy to use anywhere, even when bench space is limited.

#### 5. Auto Setup

Quickly configure vertical, horizontal and trigger settings with a single button press.

### 6. Intensity/Replay Control

Rotate to control waveform intensity, or push to toggle to Replay mode. In Replay mode, rotate this knob to see a history of waveforms captured by the WaveJet.

#### 7. Active Channel Indicators

These channel LEDs are color matched to each waveform on the display. The active channel for the vertical controls is always lit to simplify operation.

#### 8. Push Knobs

Push the Offset knob to automatically zero the channel offset, or the Delay knob to automatically center the trigger point on the screen.

## **Specifications and Ordering Information**

Specifications	WaveJet 314	WaveJet 312	WaveJet 324	WaveJet 322	WaveJet 334	WaveJet 332	WaveJet 354	WaveJet 352
Bandwidth	100 MHz		200 MHz		350 MHz		500 MHz	
Rise Time	3.5 ns		1.75 ns		1 ns		750 ps	
Input Channels	4	2	4	2	4	2	4	2
Display	7.5" Color f	lat-panel TFT-	LCD, 640 x 4	80 VGA				
Sample Rate (single-shot)	1 GS/s 2 GS/s (Interleaved), 1 GS/s (all channel)							
Sample Rate (RIS)	100 GS/s							
Peak Detect Period	1 ns							
Memory Length	500 kpts/Ch (all channels)							
Capture Time	500 μs at 1 GS/s, 250 μs at 2 GS/s							
Vertical Resolution	8 bit							
Vertical Sensitivity	2 mV/div-10 V/div				2 mV/div–10 V/div, 2 mV/div–2 V/div (50 Ω)			
Vertical (DC) Gain Accuracy	± (1.5% + .5% of full scale)							
BW Limiting Filters	20 MHz			20 MHz, 200 MHz				
Maximum Input Voltage	400 V CAT I			400 V CAT I, 5 V <sub>rms</sub> (50 Ω)				
Input Coupling	GND, DC 1 MΩ, AC 1 MΩ			GND, DC 1 M $\Omega$ , AC 1 M $\Omega$ , DC 50 $\Omega$				
Input Impedance	1 MΩ ±1.5%   20 pF			1 MΩ ±1.5%   16 pF, 50 Ω ±1.5%				
Probing System	BNC with Probe Sense Ring							
Probes	PP010 (One per Channel)			PP006A (One per Channel)				
Timebase Range	5 ns/div-50 s/div 2 ns/div-50 s/div			1 ns/div	–50 s/div	500 ps/d	liv-50 s/div	
Roll Mode	50 ms/div–50 s/div (100 kS/s maximum)							
Timebase Accuracy	10 ppm (typical)							
Triggering								
Triggers	Edge, Width, Period, Pulse Count, TV							
Measure, Zoom, Math and Replay								
Measure	Base, Cycle Mean, Cycle RMS, Duty Cycle, Fall Time (90-10%), Fall Time (80-20%), Frequency, Integral, Maximim, Mean, Minimum, Number of +Pulses, Number of -Pulses, +Overshoot, -Overshoot, Peak-Peak, Period, +Pulse Width, -Pulse Width, Rise Time (20-80%), Rise Time (10-90%), RMS, Skew, Skew@level, Top, Top-Base							
Zoom	Use the front panel QuickZoom button to zoom all waveforms in a separate zoom grid							
Math		Sum, Difference, Product, FFT (up to 8 kpts with Rectangular, Hanning or Flat Top)						
Replay	Look back at the history of waveform acquisitions (Maximum 1024 acquisitions)							
Physical Dimensions								
Dimensions (HWD)	190 mm x 285 mm x 102 mm (7.5" x 11.2" x 4")							
Net Weight	3.2 kg; 7 lbs.							

### **Ordering Information**

WaveJet 4-Channel/2-Channel Oscilloscopes	<b>Product Code</b>	
500 MHz, 4 Ch, 2 GS/s (Max.), 500 kpts/Ch with 7.5" Color Display	WaveJet 354	
500 MHz, 2 Ch, 2 GS/s (Max.), 500 kpts/Ch, with 7.5" Color Display	WaveJet 352	
350 MHz, 4 Ch, 2 GS/s (Max.), 500 kpts/Ch with 7.5" Color Display	WaveJet 334	
350 MHz, 2 Ch, 2 GS/s (Max.), 500 kpts/Ch with 7.5" Color Display	WaveJet 332	
200 MHz, 4 Ch, 2 GS/s (Max.), 500 kpts/Ch with 7.5" Color Display	WaveJet 324	
200 MHz, 2 Ch, 2 GS/s (Max.), 500 kpts/Ch with 7.5" Color Display	WaveJet 322	
100 MHz, 4 Ch, 1 GS/s, 500 kpts/Ch with 7.5" Color Display	WaveJet 314	
100 MHz, 2 Ch, 1 GS/s, 500 kpts/Ch with 7.5" Color Display	WaveJet 312	
Included with Standard Configuration		

#### Included with Standard Configuration

One Passive Probe per channel Getting Started Manual, Quick Reference Guide Calibration and Performance Certificate

Three-Year Warranty

#### **Customer Service**

LeCroy oscilloscopes are designed, built, and tested to ensure high reliability. In the unlikely event you experience difficulties, our digital oscilloscopes are fully warranted for three years.

This warranty includes:

- No charge for return shipping
- Long-term 7-year support
- Upgrade to latest software at no charge



Local sales offices are located throughout the world. To find the most convenient one visit www.lecroy.com