LeCroy

WaveJet® 300 Series
Oscilloscopes

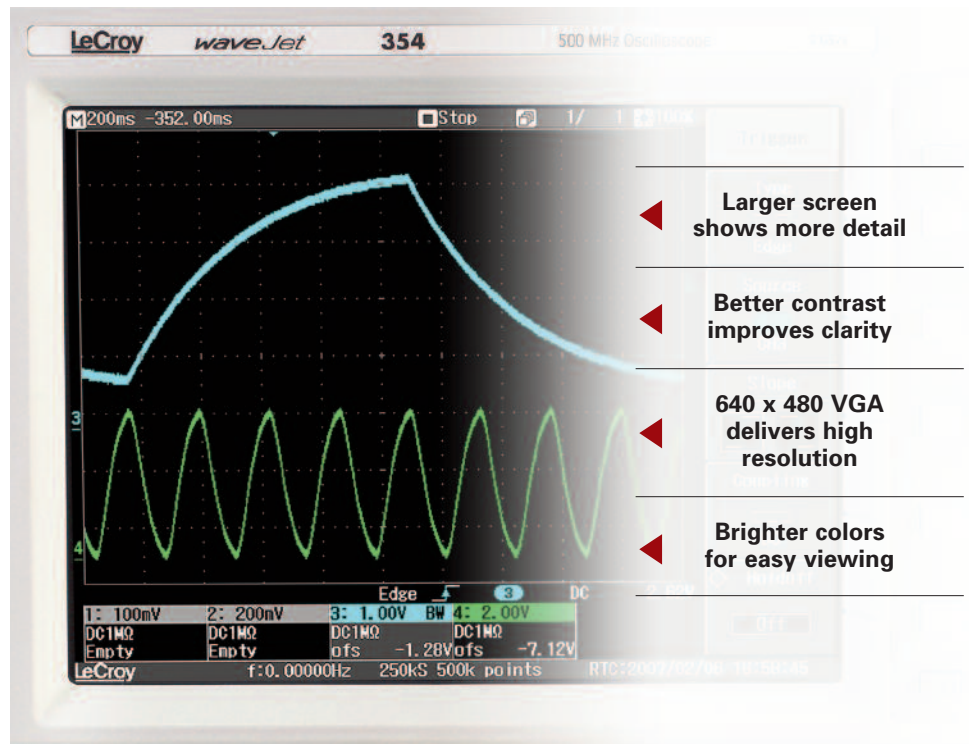**Unmatched Performance,
Portability and Value**

A Unique Toolset for Portable Oscilloscopes

The right tools make debugging and validating a faster and smoother process. The WaveJet 300 Series provides more tools and greater performance than other oscilloscopes in the 100 MHz to 500 MHz range. It sets a new standard for portable oscilloscopes.
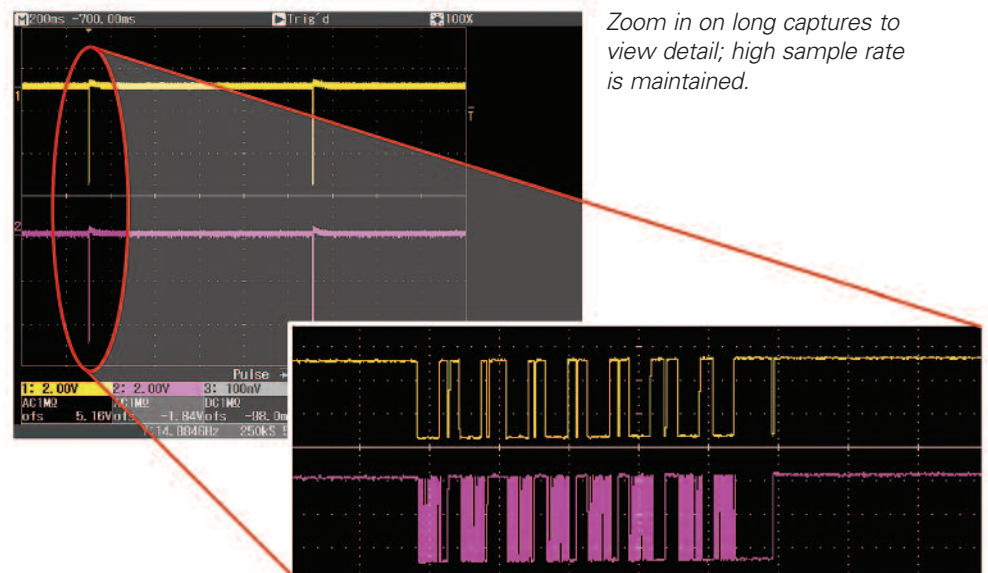
Seeing your Waveforms

The display of any oscilloscope is the main tool for viewing waveforms; typically displays in small portable oscilloscopes are small, dim low resolution displays. The WaveJet is different, the 7.5" color display is bigger and brighter and offers excellent viewing angles. The 640 x 480 VGA resolution allows you to see waveform details clearer than some other scopes, which offer only 1/4 the resolution.

◄ **Larger screen shows more detail**

◄ **Better contrast improves clarity**

◄ **640 x 480 VGA delivers high resolution**

◄ **Brighter colors for easy viewing**
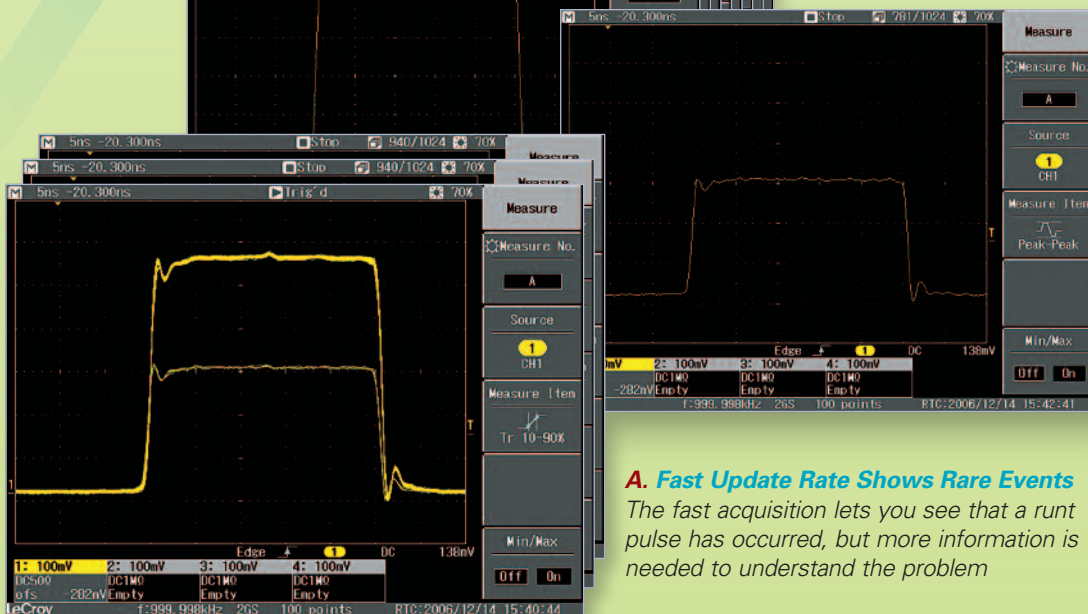
Long Capture Time

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

Zoom in on long captures to view detail; high sample rate is maintained.

Replay Mode Isolates Rare Events

Most engineers and technicians will agree that it is important to see waveforms updating rapidly in order to see rare events or signal anomalies. These rare events show up briefly and then fade away. But with WaveJet you can easily capture them for a closer look. The oscilloscope's fast update rate of up to 3600 wfms/s combines with Replay Mode to go back in time to isolate and measure the anomaly.

Up to 1024 Waveforms in Replay memory

D. Solve the Problem
Use Replay to help you understand the cause of the problem by seeing what comes before or after the runt pulse.

C. Understand the Anomaly
Looking back over 1024 consecutive acquisitions allows you to see recurring problems and to understand if they occur in a predictable pattern.

B. Isolate the Problem
Go back in time to look at the history of your waveform. The runt pulse has been isolated and now it can be measured.

A. Fast Update Rate Shows Rare Events
The fast acquisition lets you see that a runt pulse has occurred, but more information is needed to understand the problem

Intuitive User Interface Simplifies How You Work

The WaveJet 300 Series offers a set of features and capabilities not typically found in a portable oscilloscope. Its small form factor boasts the biggest, brightest, highest resolution display in this class. It also provides connectivity through USB, GPIB, and Ethernet. These features, plus the longest memory length available in a small portable oscilloscope, make the WaveJet truly unique.

1. Display

The 7.5" VGA display allows you to easily view signal details. It also provides room to display measurements and menus without cluttering the waveform grid.

2. Power Up Time

The WaveJet is on and ready to use in less than 3 seconds.

3. 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.
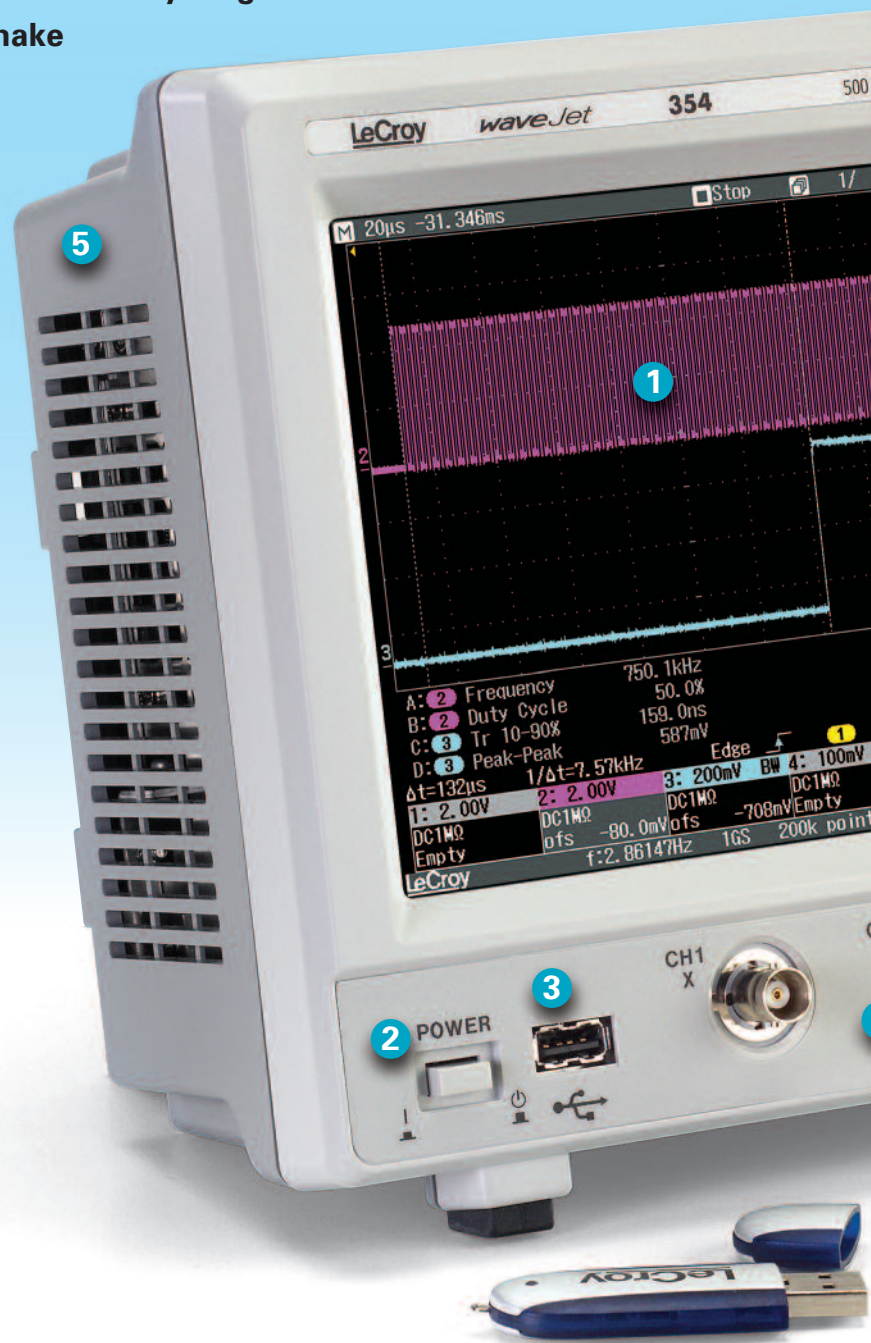
4. Probe Sense Ring

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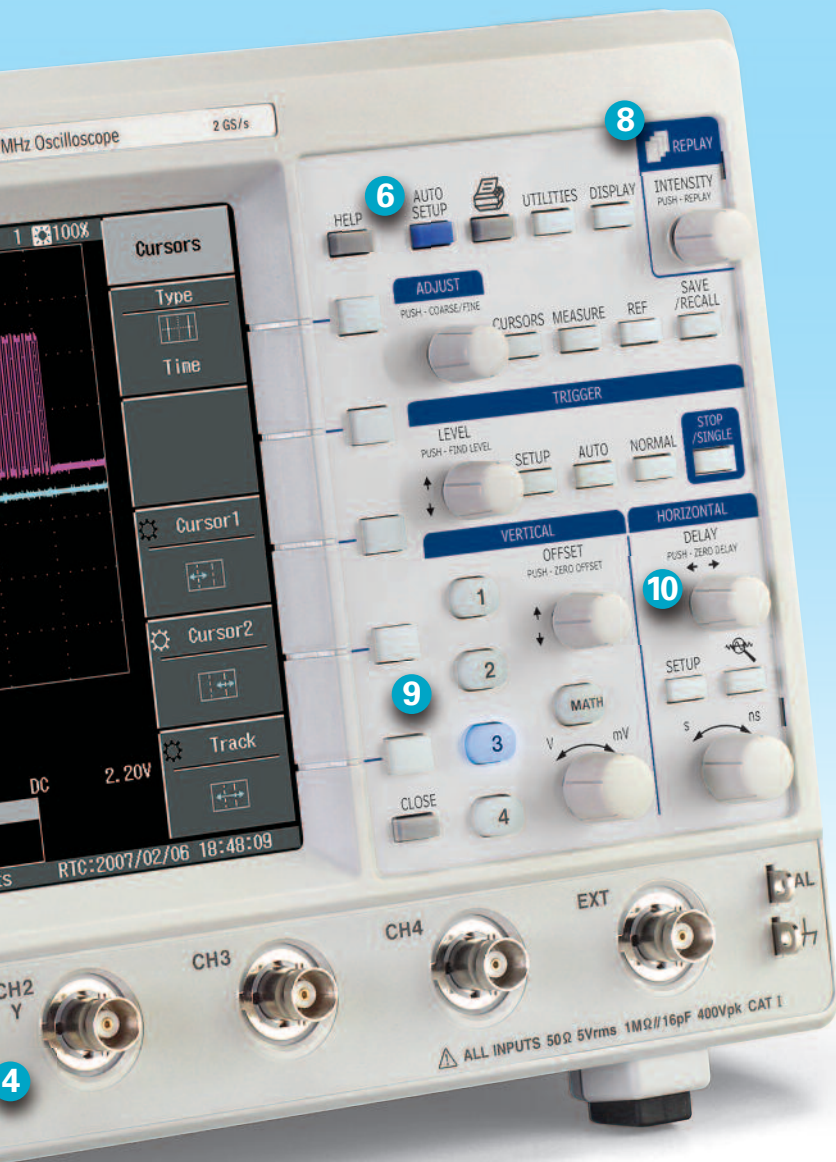
5. Portability

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

6. Auto Setup

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

7. Communication

Communicate with WaveJet using GPIB or Ethernet with WaveJet's available plug-in remote control accessories. Make use of LeCroy's ScopeExplorer or ActiveDSO tools for easy communication between the WaveJet and your PC.

8. 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.

9. 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.
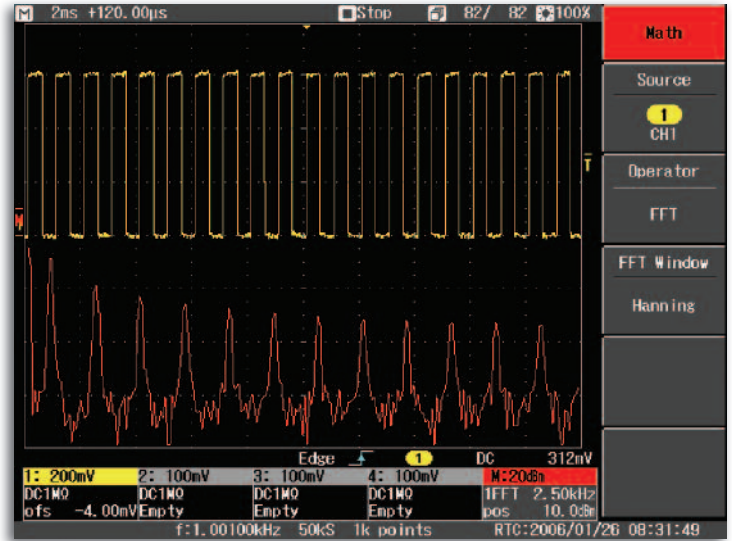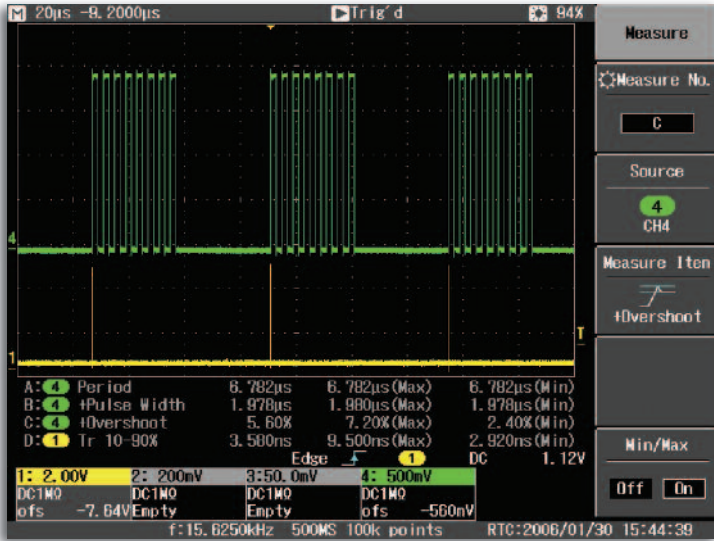
10. Push Knobs

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

11. Local Language User Interface

Select from 9 different language preferences.
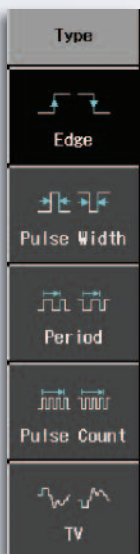
All The Capabilities You Need

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.

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.

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 sampling 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.

Specifications

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 flat-panel TFT-LCD, 640 x 480 VGA							
Sampling Rate (single-shot)	1 GS/s		2 GS/s (Interleaved), 1 GS/s (all channels)					
Sampling 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% + 0.5% 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_{rms} (50 Ω)			
Input Coupling	GND, DC 1 MΩ, AC 1 MΩ				GND, DC 1 MΩ, AC 1 MΩ, DC 50 Ω			
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/div–50 s/div	
Roll Mode	50 ms/div–50 s/div (100 kS/s maximum)							
Timebase Accuracy	10 ppm (typical)							

Triggering

Triggers	Edge, Glitch, 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, Von Hann, 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	Product Code
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

One Passive Probe per channel

Multi-language User Interface (English, Chinese, French, German, Italian, Japanese, Korean, Russian and Spanish)

Getting Started Manual, Quick Reference Guide

Calibration and Performance Certificate

Three-Year Warranty

Accessories

GPIB Interface for WaveJet 300 Series	WJ-GPIB
10/100Base-T Interface for WaveJet 300 Series	WJ-LAN

Customer Service

LeCroy oscilloscopes and probes 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, and our probes are warranted for one year.

This warranty includes:

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

LeCroy

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

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