



LeCroy Digital Oscilloscopes

Get the Complete Picture



NEW!

LT364 and LT364L

**1 GS/s Sample Rate
2 Megapoints
Ethernet Option**

LeCroy



Waverunner™

**EASY AS 1-2-3
for high productivity**

**FULLY LOADED
for outstanding performance**

**ANALOG PERSISTENCE™
standard with each model**

**UNCOMMON VALUE
in a mid-range scope**

Why Walk When You Can Run?

CATCH THE FRESH WAVE OF THINKING in oscilloscope design—the new LeCroy *Waverunner*. Unlike any other scope in its class, it puts complete functionality with maximum power on your desk or workbench. And all of this capability is available in one remarkably easy-to-use format. From troubleshooting to timing analysis to production testing, the LeCroy *Waverunner* series is uniquely qualified to meet your requirements.

Because There's No Such Thing as a Perfect Wave.

NO MATTER WHAT YOUR CHALLENGE, the *Waverunner* scope will help you solve it faster. This new scope is designed for technicians and engineers working in test, design, and service, including:

- Electromechanical
- Automotive
- Power Conversion
- General Electronics

... AND MANY MORE APPLICATIONS.

For screen capture and viewing, the *Waverunner* scope is simply brilliant. Its exceptionally strong feature set and complete range of add-ons, including math tools and probes, bring you to solutions faster and easier.

The Waverunner Series

Document your work using Strip Chart mode on the graphics printer (optional) or print to the standard Centronics™ interface.



The color, 8.4" TFT display is large, bright, and crisp, so it's easy to recognize signal features. Connect an external VGA monitor for remote viewing.

Icons show trigger conditions.

Intelligent ProBus® interface automatically configures the scope for compatible current, voltage, and differential probes.

Compact footprint provides more space on your bench to do your work.



Autosetup adjusts the scope to automatically display the signal.

SMART Trigger® lets you see hard-to-catch glitches, dropouts, and timing errors.

NEW!
Pattern Trigger on five inputs on LT364/L models.

Easy to navigate with an optimized set of knobs, buttons, and simple menus.

Math Tools include FFTs, averaging, high resolution, and more...so you:

- see the signal
- see the spectrum
- measure the result

with the most complete set of waveform analysis tools available.

Analog Persistence™ lets you see your signal using the best of both analog and digital scope methods.

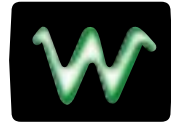
Measure Tools – one press of the button gives you control of automatic measurements and cursors.

NEW! Optional Ethernet Interface.

ALSO AVAILABLE ON THE REAR PANEL

- GPIB, RS-232-C
- PCMCIA interface
- Logic signal output, so you can trigger another test instrument or use Pass/Fail for test system control.

Menu Control Buttons – use these buttons and controls to access and navigate menus.



waverunner™

Unusually Capable, Remarkably Effortless

CATCH THESE SPECS

The *Waverunner* oscilloscopes provide all you need to quickly view, measure, and evaluate your signals – accurately and reliably:

- 500 MHz bandwidth
- 25 GS/s for repetitive signals
- 1 GS/s max single-shot sample rate
- Up to two million data points to view signals with high resolution over longer time intervals.

Its powerful, integrated processors provide rapid response. Turn a knob or press a button – *Waverunner* scopes respond instantly.

ANALOG PERSISTENCE FOR A FRESH VIEW

This affordable new class of scopes brings you the power of LeCroy Analog Persistence. All it takes is one touch of the green button to get an analog-like view of your waveforms and explore the full depth of signal information. Then the 8.4" color display lets you clearly see the information you might have missed.

EASY TO USE

The *Waverunner* series is designed to quickly get you up and running. Its color-coded front panel and simple menu system are easy to understand, so your focus is on

the work, not the tool. Common tasks are automatic. Navigation is logical and intuitive. You'll easily master its powerful operations.

THE RIGHT PRICE

The *Waverunner* scope raises the bar when it comes to value – you get more for your money than with any other scope in this class. And because *Waverunner* can be upgraded, you can extend its life to meet future needs.

INCREASE YOUR PRODUCTIVITY

Expand the vertical resolution, view the spectrum of a signal with an FFT, average to reduce noise, and more. Two optional measurement packages give you additional capabilities to datalog, integrate, and more. LeCroy's signal diagnostic and troubleshooting tools provide a complete solution for jitter and timing analysis and power measurement.

GETTING STARTED

Waverunner scopes give you three quick ways to find the information you need:

- Quick Reference Guide
- In-depth Operator's Manual organized for first-time and experienced users
- HTML Manual on CD-ROM

NEW!

NEW!

Waverunner COLOR DIGITAL OSCILLOSCOPE SPECIFICATIONS

Model	Bandwidth	Channels	Sample Rate	Acquisition Memory
LT364L	500 MHz	Four	1 GS/s (2 Ch)	2 Mpts (2 Ch)
LT364	500 MHz	Four	1 GS/s (2 Ch)	500 kpts (2 Ch)
LT344L	500 MHz	Four	500 MS/s	1 Mpts/Ch
LT344	500 MHz	Four	500 MS/s	250 kpts/Ch
LT342L	500 MHz	Two	500 MS/s	1 Mpts/Ch
LT342	500 MHz	Two	500 MS/s	250 kpts/Ch
LT322	500 MHz	Two	200 MS/s	100 kpts/Ch
LT224	200 MHz	Four	200 MS/s	100 kpts/Ch

See the Third Dimension

Scopes are great tools that help technicians and engineers understand the operation of electrical and electronic systems. With Analog Persistence, you see a third dimension. Are you concerned with intermittent runs or timing problems? Just press the green button and see infrequent

Press the green button for direct access to Analog Persistence.



signal anomalies such as slow edges, pulse width variations, runs, and glitches. The intensity and color variation indicate the relative rate, such as a clock's period varying once every 100 cycles. Analog Persistence gives you insight into what is happening in your system.

SMART TRIGGER

Another touch of a button expands your ability to lock onto a problem signal. The SMART Trigger function uses an icon display and menu control, so you can set trigger

conditions like timing intervals, edges, and TV formats. *Waverunner* oscilloscopes can trigger on hard-to-find glitches down to 2 ns, catch signal dropouts, or trigger when the signal falls within a window. You can even set up an exclusion trigger to find events that differ from the nominal signal. The new Pattern Trigger operates on up to five inputs per signal.

MEASURE ON THE SCREEN

Cursor measurements let you dial into a specific section of your waveform to measure the peak voltage or the time between signal features, such as glitches on two different channels. The user interface and large display let you quickly perform basic measurements. Cursors work in XY display mode so you can read the angle in degrees and the radius in volts for CDMA signals.

MANY WAYS TO ACQUIRE YOUR SIGNAL

Waverunner scopes capture and display waveforms in several ways. Capturing and viewing the signal is as easy as 1-2-3. The scope can also record signals in a segmented memory to take snapshots of a fast-changing event. For slower signals, Roll Mode uses the high-resolution display to give a strip chart view of up to four channels. These capabilities make this scope unique for a wide variety of applications, from electronic devices and sensors to electromechanical systems.

The Scope with Solutions

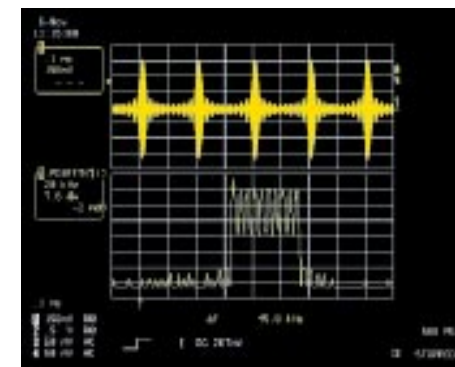
The *Waverunner* series provides the best set of troubleshooting and analysis tools available. It gives you maximum power to measure and analyze in the time domain and in the frequency domain with FFTs.

MEASURE & MATH TOOLS

Choose from 25 automatic measurements that update with your waveform – live, on-screen. Turn on statistics for the parameter's average and standard deviation to fully characterize or troubleshoot your circuit. Math Tools let you average (1000 sweeps) to reduce random noise or increase vertical resolution (to 11 bits). Select an optional analysis package for even more power, using the same, easy-to-navigate menu system.

SPECTRUM ANALYSIS WITH FFTs

View the FFT of a 50 kpoint waveform while the signal trace updates on the screen. Simultaneously see both the time and frequency domains, even on transient

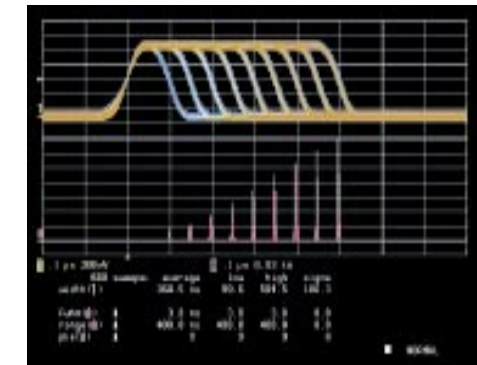


signals. Use cursors to measure the frequency of peaks in the FFT. Perform Pass/Fail testing of the spectra to a tolerance mask.

See transient signals with the time waveform and the frequency spectrum in different colors.

EXTENDED MATH & MEASUREMENTS

This option gives you over 40 measurement parameters and additional math tools to increase your productivity (integrate, differentiate, square, log). You can even datalog measurements with the trend function.



Automatic measurements and histograms help characterize circuits.

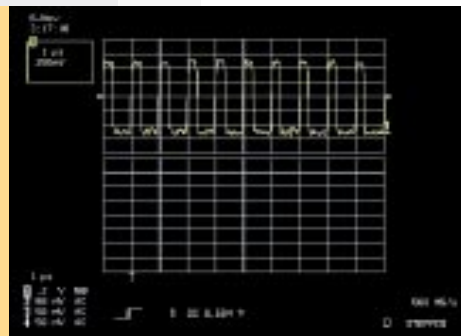
Only *Waverunner* lets you perform math-on-math. Deskew the channels, measure current and voltage, multiply for power, then integrate for energy.

THE COMPREHENSIVE WAVE ANALYZER

The WaveAnalyzer™ option is the ultimate tool for characterization and troubleshooting in time, frequency, and statistical domains for design and research applications. Waveform averaging increases to one million sweeps and FFT spectrum analysis to one million points. Histogram analysis lets you view and measure statistical variations.

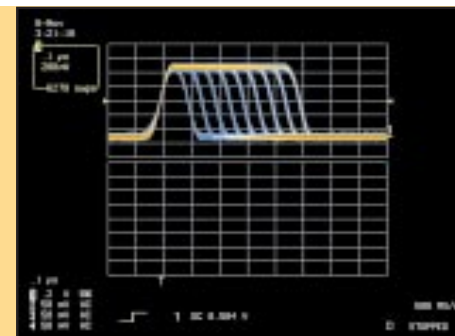
EASY STEPS

Using your *Waverunner* scope is as easy as 1-2-3!

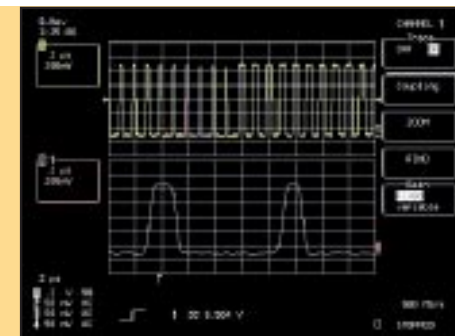


Waverunner has a powerful interface. Simply connect your signal, press **AUTO SETUP**, and view.

LeCroy SMARTMemory ensures the highest time resolution for the time window displayed.

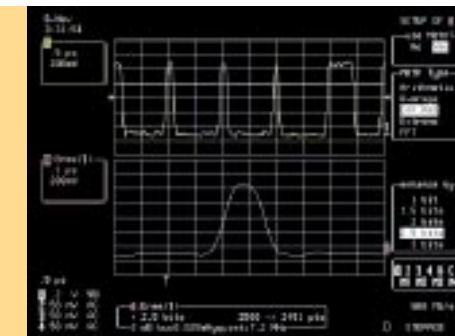


Press the green button and you have the power of Analog Persistence. This three-dimensional view shows variations in pulse width.



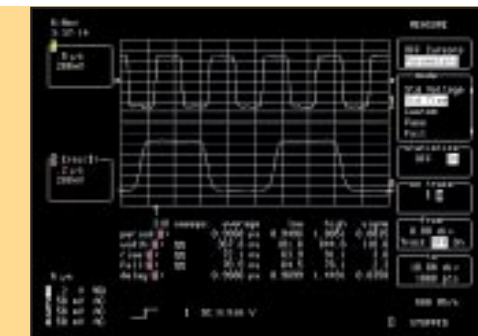
To zoom in on the signal, select **CHANNEL 1**, press **ZOOM**, and view.

Use the zoom controls to magnify and inspect. Press Auto Scroll to search and scan.



Press **MATH TOOLS** to choose from a wide variety of waveform math and analysis tools.

Use enhanced resolution (ERES) to filter noise and increase vertical resolution.



Press **MEASURE TOOLS** to choose from a wide range of time and voltage measurements to characterize your signal.

Powerful Applications

The *Waverunner* oscilloscope acquires signals with high fidelity and integrity. A variety of measurement and analysis tools, as well as probes and accessories, are available. And it's easy to upgrade.



Whether you are troubleshooting, debugging, characterizing circuits and systems, or testing in production, *Waverunner* scopes get the job done. Standard features include Analog Persistence, SMART Trigger, FFTs, automatic measurements, waveform math, and Pass/Fail testing.

Use the standard passive probes for 500 MHz bandwidth at the probe tip. Choose an active FET probe to minimize loading on your circuit, or for differential measurements, select the active 500 MHz differential probe. ProBus automatically controls and configures your LeCroy probes.

A TIME ANALYZER IN A SCOPE

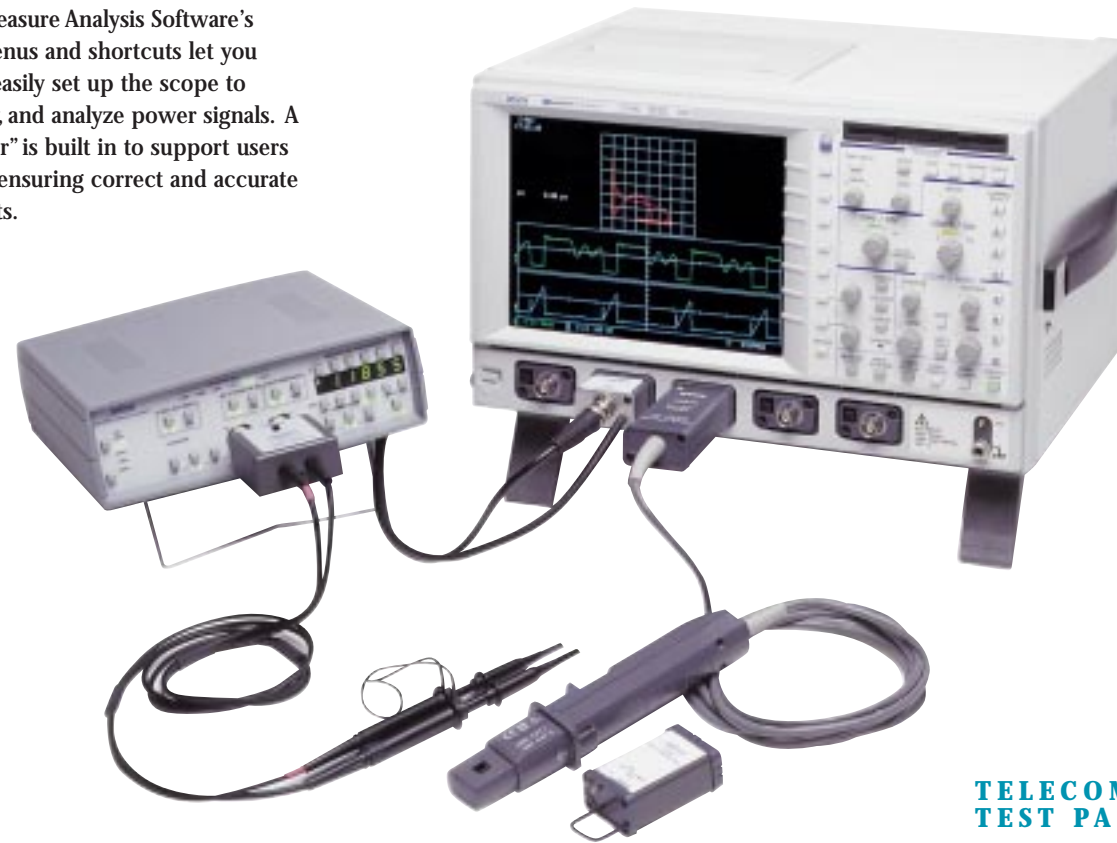
Jitter and Timing Analysis (JTA) enables precise measurements with enhanced timing resolution, and lets you view in the time, frequency, and statistical domains.

JTA lets you display the jitter function as well as its source signal. Both are perfectly time correlated, so anomalies can be directly observed on the source trace. Use the JitterTrack™ feature to plot cycle-to-cycle jitter, interval error, period, pulse width, or duty cycle versus time. Use persistence trace histograms to measure jitter and noise on eye diagrams.

WORLD-CLASS POWER MEASUREMENT SYSTEM

LeCroy's PowerMeasure™ System provides a complete solution that makes easy work of even your most difficult power-related measurements. Perform power device, modulation, and line power analyses quickly and easily.

The PowerMeasure Analysis Software's dedicated menus and shortcuts let you quickly and easily set up the scope to acquire, view, and analyze power signals. A "Setup Helper" is built in to support users step-by-step, ensuring correct and accurate measurements.



The PowerMeasure System is the most complete high-performance design system available for the power conversion engineer. It will do everything you want to do...with just the push of a few buttons!

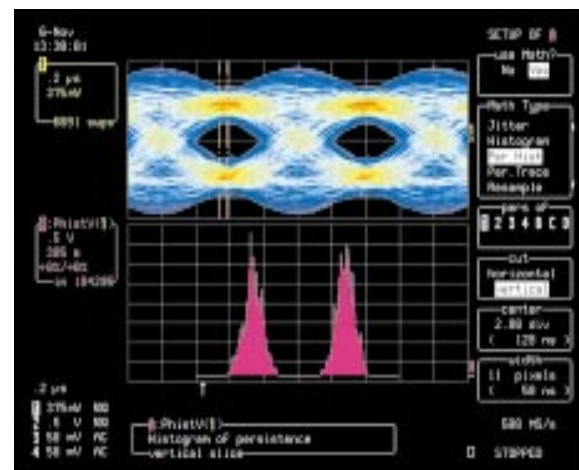
The system includes the Waverunner scope, high-performance current and differential voltage measurement capabilities, and powerful software for your key measurements.

TELECOM MASK TEST PACKAGE

LeCroy offers several Tolerance Mask Testing Options for Telecom, Datacom and general purpose applications. Mask testing provides the capability to compare a trace against a mask template to check if it falls inside or outside the mask boundaries. Several actions may be taken if the trace fails the test.

The latest addition to the LeCroy Mask Testing lineup is PolyMask™. Using a PC, engineers can create complex mask templates. This feature can be activated by obtaining the option key from LeCroy.

For specific Telecom signal testing, consider the MT01 and MT02 packages. With their exclusive Finder Function, pulses, patterns or even random bit streams are easily isolated. MT01 and MT02 are easy to use. They take control of the Waverunner oscilloscope, displaying only relevant test menus.



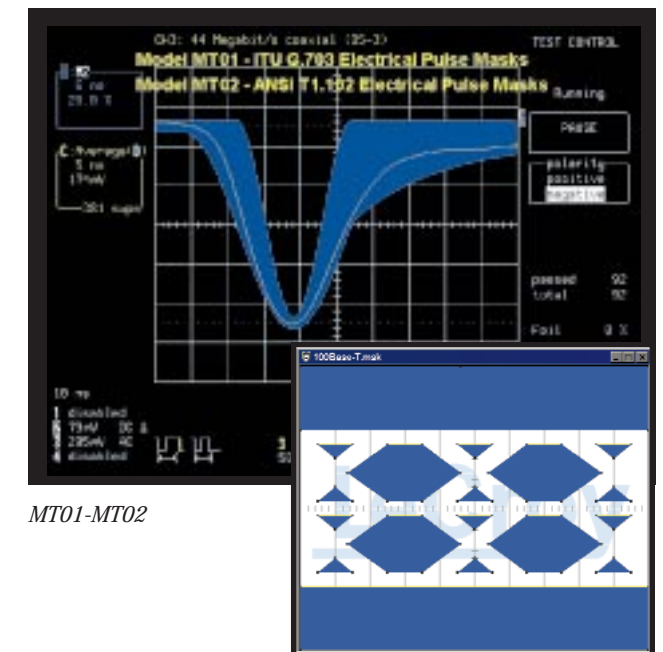
The JTA persistence histogram shows the variation of the waveform within amplitude or time slices.

SOFTWARE TO ENHANCE PRODUCTIVITY

ScopeExplorer™ and ActiveDSO™ are Microsoft Windows (95, 98, or NT) PC-based connectivity tools that make it easy to interface your *Waverunner* scope with a PC via RS-232-C, GPIB, or Ethernet. It's easy to integrate scope data with Windows applications, as well as to control the scope from your PC. Tools and interfaces are standard.



All it takes is a PC with Windows 95, 98, or NT and a GPIB, RS-232-C, or New 10 Base-T Ethernet option.



MT01-MT02

PolyMask Pass/Fail template for 100-BaseT

Technical Specifications

Acquisition System

INPUT IMPEDANCE: 50 Ω ±1.0%; 1 MΩ // 12 pF typical (using PP006 probe)

INPUT COUPLING: 1 MΩ: AC, DC, GND; 50 Ω: DC, GND

MAX INPUT: 50 Ω: 5 Vrms; 1 MΩ: 400 Vmax (peak AC ≤5kHz + DC)

VERTICAL RESOLUTION: 8 bits

SENSITIVITY: 2 mV–10 V/div fully variable

DC GAIN ACCURACY: ± (1.5% + 0.5% of full scale)

OFFSET RANGE: 2 mV–50 mV/div: ±1 V

100 mV–500 mV/div: ±10 V

1 V–10 V/div: ±100 V

Timebase System

TIMEBASES: Main and up to four zoom traces simultaneously

CLOCK ACCURACY: ≤10 ppm

INTERPOLATOR RESOLUTION: 5 ps

EXTERNAL CLOCK: ≤500 MHz, 50 Ω, or 1 MΩ impedance (LT342/LT344/LT364); ≤200 MHz, 50 Ω, or 1 MΩ impedance (LT322/LT224)

ROLL MODE: ≤500 kpts: 500 ms–1000 s/div, 100 ks/s max; ≥500 kpts: 1 s–1000 s/div, 100 ks/s max

Triggering System

MODES: Normal, Auto, Single, and Stop

SOURCES: Any input channel, external, Ext/10 or line; slope, level, and coupling are unique to each source (except line trigger).

COUPLING MODES: DC, AC, HF, HFREJ, LFREJ (reject frequency 50 kHz typ)

PRE-TRIGGER RECORDING: 0–100% of horizontal time scale

POST-TRIGGER DELAY: 0–10,000 divisions

HOLDOFF BY TIME OR EVENTS: Up to 20 s or from 1 to 99,999,999 events

INTERNAL TRIGGER RANGE: ±5 div

MAXIMUM TRIGGER FREQUENCY: Up to 500 MHz with HF coupling

EXTERNAL TRIGGER INPUT: 0.5 V, ±5 V with Ext/10; max input same as input channels

Autosetup

Automatically sets timebase, trigger, and sensitivity to display a wide range of repetitive signals; vertical find automatically sets sensitivity for the selected input signal.

Probes

MODEL PP006: 10:1, 10 MΩ with autodetect (one per channel)

PROBE SYSTEM: ProBus Intelligent Probe System supports differential amplifiers and active, high-voltage, current, and differential probes.

ACQUISITION SYSTEMS

	IT364/L	IT342/L & 344/L	IT322	IT224
Bandwidth	500 MHz	500 MHz	500 MHz	200 MHz
Channels	4	2/4	2	4
Interleaved Channels	2	0	0	0
Single Shot Sample Rate Per Ch	500 MS/s	500 MS/s	200 MS/s	200 MS/s
Max Sample Rate	1 GS/s	500 MS/s	200 MS/s	200 MS/s
Repetitive Sample Rate	25 GS/s	25 GS/s	10 GS/s	10 GS/s
Acquisition Memory/Ch				
Standard Model	250 kpts	250 kpts	100 kpts	100 kpts
L Model	1 M	1 M		
Max Acquisition Memory				
Standard Model	500 kpts	250 kpts	100 kpts	100 kpts
L Model	2 M	1 M		
Sequential Acquisition Memory				
Standard Model	2 – 1000	2 – 1000	2 – 400	2 – 400
L Model	2 – 4000	2 – 4000		
Single Shot Time Base Setting	5 ns/div – 1000 s/div	10 ns/div – 1000 s/div	20 ns/div – 1000 s/div	20 ns/div – 1000 s/div
Repetitive Time Base Setting	1 ns/div – 5 μs/div	1 ns/div – 5 μs/div	1 ns/div – 10 μs/div	1 ns/div – 10 μs/div
Bandwidth Limit Selections	25 or 200 MHz	25 or 200 MHz	25 or 200 MHz	25 MHz

Technical Specifications

WAVERUNNER TRIGGERS

Name	Description	Edge or SMART Trigger®
Edge/Slope/Window/Line	Triggers when signal meets slope and level condition.	Edge
Signal pulse width	Triggers on glitches down to 2 ns. Width selectable from <2.5 ns to 20 s or on intermittent faults.	SMART
Signal interval	Triggers on intervals selectable between 10 ns and 20 s.	SMART
State or edge qualified	Triggers on input only after a defined state or edge occurred on another channel. Delay between sources is selectable by time or events.	SMART
Dropout	Triggers if the input signal drops out for longer than selected time between 25 ns and 20 s.	SMART
Pattern *	Triggers on logic combination of five inputs — CH1, CH2, CH3, CH4, and EXT trigger, where each source can be defined as High, Low, or Don't Care.	SMART
TV	Triggers on line (up to 1500) NTSC, or nonstandard video, choice of fields †	SMART

* IT364/L only

† 1, 2, 4, 8 fields for IT364/L; odd or even fields for all other models

Color Waveform Display

TYPE: Color 8.4" flat panel TFT-LCD with VGA

SCREEN SAVER: Display blanks after 10 minutes.

REAL TIME CLOCK: Date, hours, minutes, and seconds displayed with waveform

NUMBER OF TRACES: Maximum of eight on LT344, six on LT342; simultaneously display channel, zoom, memory, and math traces

GRID STYLES: Single, Dual, Quad, Octal, XY, Single+XY, Dual+XY; Full Screen gives enlarged view of each style

WAVEFORM STYLES: Sample dots joined or dots only – regular or bold

Analog Persistence Display

ANALOG AND COLOR-GRADED PERSISTENCE: Variable saturation levels; stores each trace's persistence data in memory

TRACE DISPLAY: Opaque or transparent overlap

Zoom Expansion Traces

STYLE: Display up to four zoom traces

VERTICAL ZOOM: Up to 5x expansion, 50x with averaging

HORIZONTAL ZOOM: Expand to 2 pts/div, magnify to 50,000x

AUTO SCROLL: Automatically scan and display a captured signal

Rapid Signal Processing

PROCESSOR: 160 MHz PowerPC

MEMORY: 16 Mbytes: LT364, LT344, LT342, LT322, LT224
32 Mbytes: LT364L, LT344L, LT342L

Internal Waveform Memory

WAVEFORM: M1, M2, M3, M4*

ZOOM AND MATH: A, B, C, D*

*Store full-length waveforms with 16 bits/data point.

Setup Storage

FOR FRONT PANEL AND INSTRUMENT STATUS: Four non-volatile memories and floppy drive are standard. Hard drive and memory card are optional.

Math Tools

Simultaneously perform up to four math processing functions; traces can be chained together to perform math on math.

STANDARD MATH TOOLS:

average (summed to 1000 sweeps)

difference

enhanced resolution (to 11 bits vertical)

envelope

FFT of 50 kpoint waveforms

floor

identity

negate

product

ratio

reciprocal (invert)

resample (deskew)

rescale (with units)

roof

sin x/x

sum

Technical Specifications

CURSOR MEASUREMENTS

Type	Symbol	From	To
Relative time	↕	first point on waveform	any other point on waveform
Relative voltage	--- ---	select voltage level	any other voltage level
Absolute time	┆	time and voltage relative to	ground and trigger
Absolute voltage	--- ---	voltage	ground

Measure Tools

AUTOMATED MEASUREMENTS: Display any five parameters together with their average, high, low, and standard deviations.

STANDARD MEASURE TOOLS:

<i>amplitude</i>	<i>duty cycle</i>	<i>-overshoot</i>
<i>area</i>	<i>fall 90-10%</i>	<i>peak-to-peak</i>
<i>base</i>	<i>fall 80-20%</i>	<i>period</i>
<i>cycle mean</i>	<i>frequency</i>	<i>phase</i>
<i>cycle rms</i>	<i>maximum</i>	<i>rise 10-90%</i>
<i>cycles</i>	<i>mean</i>	<i>rise 20-80%</i>
<i>data</i>	<i>median</i>	<i>rms</i>
<i>delay</i>	<i>minimum</i>	<i>top</i>
<i>Δ delay</i>	<i>+overshoot</i>	<i>width</i>

PASS/FAIL: Test any five parameters against selectable thresholds. Limit testing is performed using masks created on the scope or PC. Setup a pass or fail condition to initiate actions such as hardcopy output, saving waveform to memory, GPIB SRQ, or pulse out.

Extended Math and Measurements Option

Adds math and advanced measurements for general purpose applications. Includes all standard math and measurement tools, plus:

EXTENDED MATH TOOLS:

<i>absolute value</i>	<i>log (base 10)</i>
<i>differentiate</i>	<i>integrate</i>
<i>exp (base e)</i>	<i>square</i>
<i>exp (base 10)</i>	<i>square root</i>
<i>log (base e)</i>	<i>trend (datalog)</i>

EXTENDED MEASURE TOOLS:

cycle median
cycle std. deviation
Δ time @ level; % and volts
Δ time @ level from trigger
Δ time from clock to data + (setup time)
Δ time from clock to data - (hold time)
duration
fall @ level; % and volts
first point
last point
number of points
rise @ level; % and volts
std. deviation

WaveAnalyzer

Includes the Extended Math and Measure Tools as well as expanded capabilities for performing FFTs, averaging, histograms, and histogram parameters.

WAVEANALYZER TOOLS

Histograms with 18 Histogram Parameters
Summed Averaging to 1 Million Sweeps
Continuous Weighted Averaging
FFT (up to 1 Mpoint Waveforms)
FFT Power Averaging
FFT Power Density, Real, and Imaginary

Other Application Solutions

JITTER AND TIMING ANALYSIS (JTA)

POWERMEASURE SYSTEM

TELECOM MASK TESTING

Interface

REMOTE CONTROL: Full control via GPIB and RS-232-C (standard) or via Ethernet for all instrument controls and internal functions (optional).

ETHERNET PORT (OPTIONAL): 10 Base-T, TCP/IP Protocol

FLOPPY DRIVE: Internal, DOS-format, 3.5" high-density

PC CARD SLOT (OPTIONAL): Supports memory and hard drive cards.

EXTERNAL MONITOR PORT: 15-pin D-Type VGA-compatible

CENTRONICS PORT: Parallel printer interface

INTERNAL GRAPHICS PRINTER (OPTIONAL): Provides hardcopy output in <10 seconds.

Outputs

CALIBRATOR SIGNAL: 500 Hz-1 MHz square wave, -1.0 to +1.0, test point and ground lug on front panel

CONTROL SIGNALS: Choice of trigger ready, trigger out, or pass/fail status; TTL levels into 1 MΩ at rear panel BNC (output resistance 300 Ω ±10%)

General

OPERATING CONDITIONS: Temperature 5-40°C; humidity 80% non-condensing at 40°C; altitude ≤2,000 meters

SHOCK AND VIBRATION: Conforms to MIL-PRF-28800P; Class C

POWER REQUIREMENTS: 90–132 V AC and 180–250 V AC; 45–66 Hz; maximum power dissipation: 150 VA–230 VA, depending on model

CERTIFICATIONS: CE, UL and cUL

DIMENSIONS (HWD): 210 mm x 350 mm x 300 mm; 8.3" x 13.8" x 11.8" (height excludes feet)

WEIGHT: 8 kg; 18 lbs

WARRANTY AND CALIBRATION: Three years; calibration recommended yearly

Ordering Information

WAVERUNNER DIGITAL OSCILLOSCOPES:	PRODUCT CODE
Four-Channel Color, 500 MHz, 500 MS/s, 1 Mpt/ch	LT364L*
Four-Channel Color, 500 MHz, 500 MS/s, 250 kpts/ch	LT364*
Four-Channel Color, 500 MHz, 500 MS/s, 1 Mpt/ch	LT344L
Four-Channel Color, 500 MHz, 500 MS/s, 250 kpts/ch	LT344
Two-Channel Color, 500 MHz, 500 MS/s, 1 Mpt/ch	LT342L
Two-Channel Color, 500 MHz, 500 MS/s, 250 kpts/ch	LT342
Two-Channel Color, 500 MHz, 200 MS/s, 100 kpts/ch	LT322
Four-Channel Color, 200 MHz, 200 MS/s, 100 kpts/ch	LT224

* LT364 & LT364L can double the sampling rate to 1 GS/s & double the acq. memory when acquiring signals on one or two channels.

INCLUDED WITH STANDARD CONFIGURATION:

10:1 10 M Ω Passive Probe (1 per channel)	PP006
Operator's Manual, CD-ROM with OM/RCM, Quick Reference Guide	LTXXX-OPDOCS
Remote Control Manual	LTXXX-RM
Math Analysis with FFT	
Floppy Disk Drive	
GPIO, RS-232-C, Centronics Interfaces and VGA Output Port	
Performance Certificate	
Three-Year Warranty	

SELECTED PROBES & ACCESSORIES:

50 MHz/30 amp (50 amp peak) Current Probe	AP015
120 kHz/150 amp Current Probe	AP011
10 MHz Differential Amplifiers	DA1820A/DA1822A
100 MHz Differential Amplifiers	DA1850A/DA1855A
\pm 10 or \pm 100 Probe Pair for DA18XXA	DXC100A
1 GHz 10:1 FET Probe with SMD Kit	AP020
DC-500 MHz Active Differential Probe	AP033
ProBus 75 to 50 Ω Adapter	PP090
Graphics Printer Paper/10 rolls	GPR10

APPLICATIONS PACKAGES:

Extended Math and Measurement Package	EMM
WaveAnalyzer Package including Histograms	WAVA
Jitter and Timing Analysis Package	JTA
PowerMeasure Analysis Software	PMA1
Telecom Mask Tester	MT01/02
PolyMask	PMSK
10BT 10-Base-T Ethernet Interface Option	LTXXX-LAN

SELECTED HARDWARE OPTIONS:

Internal Graphics Printer	GP02
PC Card Slot with HD02 and MC04	PCMEDIA
PC Card Slot	PCSLOT
PC Card Hard Disk (520 Mbytes)	HD02
512 kbytes SRAM Memory Card	MC04
64 Mbytes System Memory	64MBSM
Oscilloscope Cart	SK-2101

MANUALS:

Service Manual for LT Series	LTXXX-SM
------------------------------	----------

SERVICE OPTIONS:

Swiss OFMET Standard	CCOFMET
US NIST Standard	CCNIST
US Military Standard	CCMIL
Five-Year Warranty	W5
Five-Year Warranty & NIST Calibration	T5

***Sales and Service
Throughout
the World***

**Corporate
Headquarters**

700 Chestnut Ridge Road
Chestnut Ridge, NY 10977
USA
<http://www.lecroy.com>

***LeCroy
Sales Offices:***

Asia: Hong Kong
Phone (852) 2836 7361
Fax (852) 2836 7007

Benelux: The Netherlands
Phone: (31) 40 211 6998
Fax: (31) 40 211 6999

France: Les Ulis
Phone (33) 01 69 18 83 20
Fax (33) 1 69 07 40 42

Germany: Heidelberg
Phone (49) 06221 827 00
Fax (49) 6221 834 655

Italy: Venice
Phone (39) 041 456 97 00
Fax (39) 041 456 95 42

Japan: Osaka
Phone (81) 6 6396 0961
Fax (81) 6 6396 0962

Japan: Tokyo
Phone (81) 3 3376 9400
Fax (81) 3 3376 9587

Japan: Tsukuba
Phone (81) 298 41 5810
Fax (81) 298 41 5830

Korea: Seoul
Phone (82) 2 3452 0400
Fax (82) 2 3452 0490

Spain: Madrid
Phone: 91-4170265
Fax: 91-4170654

Switzerland: Geneva
Phone (41) 022 719 2228
Fax (41) 022 719 2230

U.K.: Abingdon
Phone (44) 1235 536 973
Fax (44) 1235 528 796

USA: Chestnut Ridge, NY
Phone (1) 914 578 6020
Fax (1) 914 578 5985

Copyright © April 2000

LeCroy, SMARTMemory, SMART Trigger, and ProBus are registered trademarks of LeCroy Corporation. All rights reserved.

PowerMeasure, JitterTrack, Waverunner, WaveAnalyzer, Analog Persistence, Scope Explorer, and Active DSO are trademarks of LeCroy Corporation.

Information in this publication supersedes all earlier versions. Specifications subject to change without notice.

Centronics is a registered trademark of Data Computer Corp. PowerPC is a registered trademark of IBM Microelectronics. Microsoft Windows and Windows NT are trademarks of the Microsoft Corporation.

Other product or brand names are trademarks or requested trademarks of their respective holders.

DCLT34X
NEG 15M 04/00

LeCroy