

Product Catalog



For more information, please contact:



HDO4000 OSCILLOSCOPES



Debug in High Definition

200 MHz – 1 GHz

Combining Teledyne LeCroy's HD4096 high definition technology, with long memory, a compact form factor, 12.1" wide touch screen display, powerful debug tools, and mixed signal capability, the HDO4000 is the ideal oscilloscope for precise measurements and quick debug.



Oscilloscopes with HD4096 12-bit technology can see cleaner, crisper waveforms with more signal details and make more precise measurements than traditional 8-bit oscilloscopes

HD4096 Technology

HD4096 high definition technology is built on high sample rate 12-bit ADCs which enables HDO oscilloscopes to capture and display signals of up to 1 GHz with high sample rate and 16 times more resolution than other oscilloscopes

WaveScan

Quickly search analog or digital waveforms for runts, glitches or other anomalies

LabNotebook

Save all results and data with a single button press and create custom reports

History Mode

Use History Mode to scroll back in time to isolate anomalies and quickly find the source of the problem

Embedded System Test Tools and Software Options

Powerful MSO capabilities plus a wide range of serial data trigger and decode capabilities as well as options for Spectrum Analyzer and Power Analysis software



View and measure analog, digital and serial data signals in one place.



Easily control channels, trigger, math and measurements with the large touch screen display and intuitive interface.



Learn More:
teledynelecroy.com/hdo

| Key Specifications | |
|---------------------|---|
| Bandwidth | 200 MHz, 350 MHz, 500 MHz, 1 GHz |
| Resolution | 12-bit ADC resolution, 15-bit with ERES |
| Channels | 2, 4, 2 + 16 or 4 + 16 |
| Memory | Up to 25 Mpts/Ch, 50 Mpts Interleaved |
| Sample Rate | 2.5 GS/s |
| Digital Sample Rate | 1.25 GS/s |
| Minimum Pulse Width | 2 ns |
| Connectivity | USB, LAN, GPIB |
| Display | 12.1" Color WXGA with Touch Screen |

WAVESURFER 10 OSCILLOSCOPES

Engineered for Efficient Design and Debug

1 GHz

WaveSurfer 10 oscilloscopes pack high performance hardware, powerful waveform processing and advanced math, measurement and debug tools into a compact form factor with a large touch screen display and intuitive user interface.



MAUI - Advanced User Interface

Designed for Touch, Built for Simplicity, Made to Solve

Uncompromised Performance

1 GHz Bandwidth, 10 GS/s Sample Rate, up to 16 Mpts/ch Memory

WaveScan

Quickly search analog or digital waveforms for runts, glitches or other anomalies

Embedded System Test Tools

Powerful MSO capabilities plus a wide range of serial data trigger and decode capabilities

LabNotebook

Quickly save all results plus flashback to previous tests and create custom reports.

Advanced Debug Toolkit

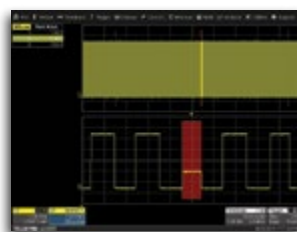
Standard on WaveSurfer 10M, the ADT option adds 10 GS/s sample rate on 4 channels, 32 Mpts of memory, sequence mode, history mode, 13 additional math functions, and 2 simultaneous math traces.



The advanced debug toolkit turns the WaveSurfer 10 into an unparalleled analysis and debug machine.



Add the MS-250 to the WaveSurfer 10 to view and measure analog, digital and serial data signals in one place.



Use WaveScan to search for and identify anomalies on analog or digital signals.

| Key Specifications | |
|--------------------|---|
| Bandwidth | 1 GHz |
| Channels | 4 or 4 + 18 |
| Sample Rate | Up to 10 GS/s |
| Standard Memory | WaveSurfer 10: 10 Mpts/Ch, 20 Mpts interleaved WaveSurfer 10M: 16 Mpts/Ch, 32 Mpts interleaved |
| Connectivity | USB, LAN, GPIB |
| Display | 10.4" Color SVGA with Touch Screen |



Learn More:
teledynelecroy.com/wavesurfer10

WAVESURFER 3000 OSCILLOSCOPES



A New **Wave** of Thinking

200 MHz – 750 MHz

WaveSurfer 3000 oscilloscopes feature the MAUI advanced user interface with touch screen simplicity to shorten debug time. The advanced probe interface, upgradable bandwidth and multi-instrument capabilities provide maximum versatility and investment protection.



Quickly identify anomalies through the combination of fast update rate, WaveScan and History mode

MAUI - Advanced User Interface

Designed for Touch, Built for Simplicity, Made to Solve

Advanced Anomaly Detection

Quickly identify anomalies through the combination of fast update rate, Pass Fail Mask Testing, WaveScan, and History mode



Flexible probing solutions and powerful math and measurement tools simplify troubleshooting

Capture. Debug. Analyze. Document.

Flexible probing solutions and powerful math and measurement tools simplify troubleshooting

Multi-Instrument Capabilities

Built in waveform generation, logic analysis, protocol analysis, and digital voltmeter



Built in waveform generation, logic analysis, protocol analysis, and digital voltmeter

Future Proof

Bandwidth, MSO, Function Generator and Protocol Analysis upgrades provide maximum investment protection

Key Specifications

| | |
|---|------------------------------------|
| Bandwidth | 200 MHz, 350 MHz, 500 MHz, 750 MHz |
| Channels | 2, 4, 2 + 16 or 4 + 16 |
| User Interface | MAUI |
| Sample Rate (Per Ch / Intlv'd) | 2 GS/s / 4 GS/s |
| Standard Memory (Per Ch / Intlv'd) | 10 Mpts / 10 Mpts |
| Update Rate | Up to 130,000 waveforms/sec |
| Display | 10.1" Touch Screen |
| Digital Channels | 16 |
| Digital Sample Rate | 500 MS/s |
| Minimum Pulse Width | 4 ns |
| Connectivity | USB Host, USB Device, LAN, GPIB |



Learn More:
teledynelecroy.com/newwave

WAVEJET TOUCH OSCILLOSCOPES

Portable Performance for Debug and Validation

350 MHz / 500 MHz

The WaveJet Touch provides the performance, features, and touch screen user interface to simplify operation and shorten debug time. The compact design features a 7.5" touch screen, providing the convenience of touch operation in a portable design.



Touch Screen

Simplifies how all aspects of oscilloscope operation are controlled

Portable Performance

Small form factor and lightweight design make it easy to carry and use anywhere

Pass/Fail Mask and Measurement Testing

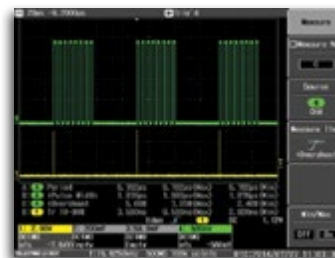
Waveforms can be tested against a mask or measurement parameters can be assigned pass/fail criteria

Replay Mode

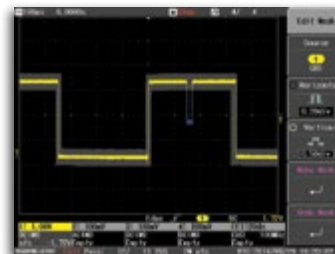
Isolate anomalies and see how a waveform has changed over time

Ultra-quick Boot Time

On and acquiring signals in less than 5 seconds, measurements can begin immediately



Speed up debugging time with 26 automatic measurements plus min/max statistics.



On a pass/fail condition the oscilloscope can be configured to perform multiple actions.



Go back in time to isolate runs, glitches or other anomalies with Replay Mode.

| Key Specifications | |
|--------------------|---------------------------------|
| Bandwidth | 350 MHz, 500 MHz |
| Channels | 4 |
| Memory | Up to 5 Mpts |
| Sample Rate | Up to 2 GS/s |
| Connectivity | USB Host, USB Device, GPIB, LAN |
| Display | 7.5" Touch screen |



Learn More:
teledynelecroy.com/wavejet-touch

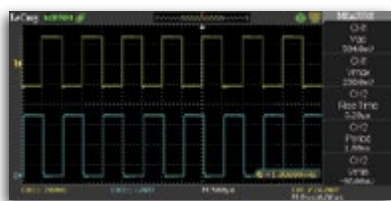
WAVEACE OSCILLOSCOPES



Debug with Confidence

40 MHz – 300 MHz

The WaveAce combines long memory, a color display, extensive measurement capabilities, advanced triggering and great connectivity to improve trouble shooting and shorten debug time.



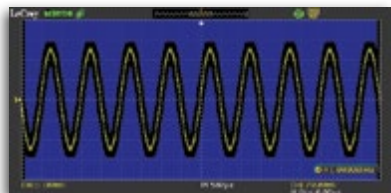
32 parameters for making vertical, horizontal and delay measurements.

Long Capture

1 Mpts/Ch and 2 Mpts interleaved to capture more time and show more waveform details

Math and Measure

4 basic math functions plus FFT and 32 automatic measurement parameters



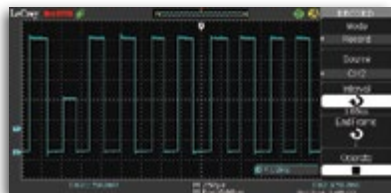
Pass/Fail mask testing can quickly identify problems.

Connectivity

USB for mass storage, printing and PC control plus LAN for fast data transfer

Pass/Fail Testing

Quickly identify failing devices and when failures occur



Capture and replay a sequence of up to 2,500 waveforms to isolate that runt or glitch which is causing problems in your system.

Large Internal Storage

Save 20 waveforms and 20 setups to the internal WaveAce memory

Waveform Sequence Recorder – record and play back up to 2,500 waveforms



| Key Specifications | |
|--------------------|---|
| Bandwidth | 40 MHz, 60 MHz, 70 MHz, 100 MHz, 200 MHz, 300 MHz |
| Channels | 2 or 4 |
| Memory | Up to 1 Mpts/Ch (2 Mpts interleaved) |
| Sample Rate | Up to 2 GS/s |
| Connectivity | USB Host, USB Device, LAN |
| Display | 7" Color WQVGA |

Point, Click, Debug

Logic analyzers are known to be slow, complicated and expensive but LogicStudio changes all this by delivering a powerful feature set, high performance hardware and an intuitive point and click user-interface.



Powerful Feature Set

Timing cursors, history mode and serial data protocol decoding help debug the most complicated problems

Easy to Use

Simple mouse operations control every aspect of the user-interface from panning and zooming waveforms to configuring the trigger

Mixed Signal

Turn your PC into an MSO by connecting LogicStudio to any of ten popular oscilloscopes from Teledyne LeCroy, Tektronix and Agilent

Serial Bus Decode and Trigger

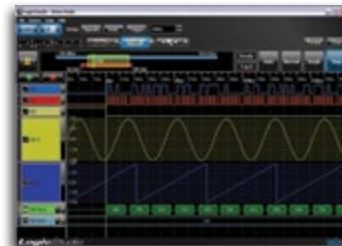
Capture and decode I²C, SPI and UART messages



View decoded protocol information for I²C, SPI and UART busses plus trigger on data being transmitted on the serial busses.



Create powerful trigger conditions by combining edge, logic level, parallel bus and serial bus triggers.



Turn any PC into an MSO by connecting LogicStudio to any of ten popular oscilloscopes from Teledyne LeCroy, Tektronix and Agilent.

Key Specifications

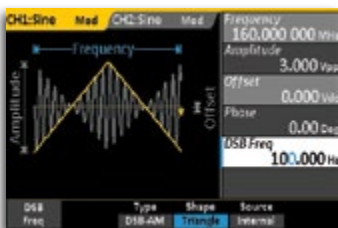
| | |
|---------------------|---------------------------------|
| Minimum Pulse Width | 3.75 ns |
| Channels | 16 |
| Memory | 20 kpts/Ch, 40 kpts Interleaved |
| Sample Rate | Up to 1 GS/s |
| Serial Bus Tools | I ² C, SPI, UART |



Try It For Free at :
teledynelecroy.com/logicstudio

Powerful Combination of Performance and Flexibility

WaveStation waveform generators provide a wide range of standard and arbitrary waveforms, a variety of modulation schemes and a simple front panel for simple, powerful, flexible waveform generation.



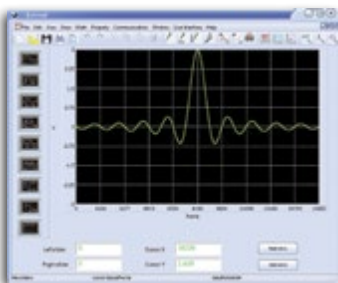
Built-in modulation capabilities include AM, PM, FM, ASK, PSK and FSK. View the modulated waveform on the display and see how it changes when varying output frequency, carrier waveform or modulation type.

High Performance and Signal Fidelity

Accurate waveform creation due to high resolution, fast sample rate, and low distortion

Extensive Waveform Library

5 basic functions and over 40 built-in arbitrary waveforms



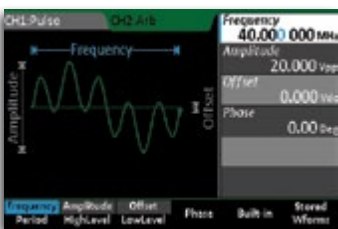
Easily create and edit waveforms on the PC with mathematical operations, filters, and point-by-point editing or draw a waveform with a mouse.

Variety of Modulation Schemes

Built-in modulation capabilities, such as, AM, PM, FM, ASK, PSK and FSK

Simple, Fast Waveform Creation

Quickly access functions from the front panel, view created waveforms and waveform parameters on the display



Quickly create basic sine, square, ramp, pulse, and noise waveforms plus over 40 advanced arbitrary waveforms.

Connectivity and Communication

USB and GPIB for simple remote control, automation and saving data

WaveStation PC Software

Easily create and edit waveforms on the PC and quickly transfer to the WaveStation

| Key Specifications | |
|---------------------|--|
| Bandwidth | 10 MHz, 25 MHz, 50 MHz, 80 MHz, 120 MHz, 160 MHz |
| Channels | 2 |
| Memory | Up to 512 kpts |
| Sample Rate | Up to 500 MS/s |
| Vertical Resolution | 14-bit |

 Learn more:
teledynelecroy.com/wavestation

Powerful, Versatile Waveform Creation

ArbStudio Arbitrary Waveform Generators provide uncompromised performance, a wide variety of signal types, modulation schemes and generation modes all controlled through an intuitive software interface.



Unmatched Performance

125 MHz, 1 GS/s, 2 Mpts/Ch and 16-bit resolution

Digital Pattern Generator

ArbStudio is a mixed signal generator capable of creating patterns of up to 36 lines

Graphical User Interface

Easily see created waveforms and waveform sequences on the display of any PC

Simple Operating Modes

Dedicated operating modes for basic functions and PWM signals provide simplified operation



Quickly generate basic functions like sine, square and triangle waves with a dedicated user interface.



Create digital waveforms, patterns and busses of up to 18 channels and output analog and digital waveforms simultaneously.



Built-in modulation capabilities include AM, PM, FM, ASK, PSK, FSK and PWM.

| Key Specifications | |
|---------------------|-----------|
| Bandwidth | 125 MHz |
| Channels | 2, 2 + 18 |
| Memory | 2 Mpts/Ch |
| Sample Rate | 1 GS/s |
| Vertical Resolution | 16-bit |



Try It For Free at:
teledynelecroy.com/arbstudio

OSCILLOSCOPE SELECTION GUIDE



**HDO4000/
HDO4000-MS**



**WaveSurfer 10/
WaveSurfer 10M**



WaveSurfer 3000

| | HDO4000/ HDO4000-MS | WaveSurfer 10/ WaveSurfer 10M | WaveSurfer 3000 |
|--|---|--|---|
| Bandwidth | 200 MHz to 1 GHz | 1 GHz | 200 MHz to 750 MHz |
| Resolution | 12-bit ADC resolution, 15-bit with enhanced resolution | 8-bit ADC resolution, 11-bit with enhanced resolution | 8-bit ADC resolution, 11-bit with enhanced resolution |
| Rise Time | 1.75 ns to 450 ps | 350 ps | 1.75 ns to 550 ps |
| Channels | 2, 4, 2 + 16, 4 + 16 | 4, 4 + 18 | 2, 4, 2 + 16, 4 + 16 |
| Display | 12.1" Color WXGA Touch Screen | 10.4" Color SVGA Touch Screen | 10.1" Color WSVGA Touch Screen |
| Memory | 12.5 Mpts/Ch 25 Mpts Interleaved | 10 Mpts/Ch 20 Mpts interleaved | 10 Mpts/Ch |
| Maximum Memory[†] | Up to 25 Mpts/Ch 50 Mpts Interleaved | 10 Mpts / 20 Mpts, 16 Mpts / 32 Mpts with WaveSurfer 10M or ADT option | – |
| Sample Rate | 2.5 GS/s | 10 GS/s | 2 GS/s to 4 GS/s |
| MSO Characteristics | 250 MHz, 1.25 GS/s [†] | 250 MHz, 1 GS/s [†] | 125 MHz, 500 MS/s [†] |
| Trigger Types | Edge, Width, Glitch, Pattern, TV, Runt, Slew Rate, Interval (Period), Dropout, Qualified | Edge, Width, Glitch, Pattern, TV, Runt, Slew Rate, Interval (Period), Dropout, Qualified | Edge, Width, Pattern, TV, Runt, Slew Rate, Interval (Period), Dropout, Qualified |
| Serial Trigger and Decode[†] | I ² C, SPI, UART, RS-232, CAN, CAN FD, LIN, FlexRay, SENT, Audio, MIL-STD-1553, D-PHY, ARINC 429, DigRF 3G, DigRF v4, ENET, Manchester, NRZ, USB 1.0/1.1/2.0, USB 2.0-HSIC, SpaceWire | I ² C, SPI, UART, RS-232, CAN, CAN FD, LIN, FlexRay, SENT, Audio, MIL-STD-1553, D-PHY, ARINC 429, DigRF 3G, DigRF v4, ENET, Manchester, NRZ, USB 1.0/1.1/2.0, USB 2.0-HSIC, SpaceWire | I ² C, SPI, UART, RS-232, CAN, CAN FD, LIN |
| Connectivity and Storage | USB Host for Storage USB Device for PC LAN for PC GPIOB for PC [†] | USB Host for Storage LAN for PC GPIOB for PC [†] | USB Host for Storage USB Device for PC LAN for PC GPIOB for PC [†] |
| Math | +, -, x, /, FFT, Absolute Value, Average, Derivative, Deskew, Envelope, Enhanced Resolution, Floor, Integral, Invert, Reciprocal, Rescale, Roof, Square, Square Root, Trend, Zoom | +, -, x, /, FFT, Derivative, Deskew, Integral, Rescale, Roof, Square, Square Root, Zoom (Absolute Value, Average, Envelope, Enhanced Resolution, Exp (base e), Exp (base 10) Floor, Invert, Log (base e), Log (base 10), Reciprocal, Roof and Trend included with WaveSurfer 10M or ADT option) | +, -, x, /, FFT, Absolute Value, Average, Derivative, Envelope, Enhanced Resolution, Floor, Integral, Invert, Reciprocal, Rescale, Roof, SinX/x, Square, Square Root, Trend, Zoom |
| Dimensions (HWD) | 291.7 x 399.4 x 131.31 mm (11.48" x 15.72" x 5.17") | 260 x 340 x 152 mm (10.25" x 13.4" x 6") | 270 x 380 x 125 mm (10.63" x 14.96" x 4.92") |
| Weight | 5.71 kg (12.6 lbs) | 7.26 kg (16.0 lbs) | 4.81 kg (10.6 lbs) |

[†]Optional



| | WaveJet Touch | WaveAce 2000 | WaveAce 1000 |
|--------------------------------------|---|---|---|
| Bandwidth | 350 MHz / 500 MHz | 70 MHz to 300 MHz | 40 MHz to 100 MHz |
| Resolution | 8-bit ADC resolution , 12-bit with enhanced resolution | 8-bit ADC resolution | 8-bit ADC resolution |
| Rise Time | 1 ns / 750 ps | 5.0 ns to 1.2 ns | 8.8 ns to 3.5 ns |
| Channels | 4 | 2, 4 | 2 |
| Display | 7.5" Color VGA Touch Screen | 7" Color WQVGA | 7" Color WQVGA |
| Memory | 2.5 Mpts/Ch 5 Mpts interleaved | 12 kpts/Ch 24 kpts Interleaved | 1 Mpts/Ch 2 Mpts Interleaved |
| Maximum Memory[†] | – | – | – |
| Sample Rate | up to 2 GS/s | 1 GS/s to 2 GS/s | 500 MS/s to 1 GS/s |
| MSO Characteristics | – | – | – |
| Trigger Types | Edge, Edge ALT, Edge OR, Pulse Width, Period, Pulse Count, Dropout, TV, Logic | Edge, Width, Video, Slope, Alternate | Edge, Width, Video, Slope, Alternate |
| Serial Trigger and Decode | I ² C, SPI, UART, RS-232 | – | – |
| Connectivity and Storage | USB Host for Storage USB Device for PC LAN for PC GPIB for PC | USB Host for Storage USB Device for PC LAN for PC | USB Host for Storage USB Device for PC |
| Math | +, -, x, FFT, Integral, Derivative | +, -, x, /, FFT | +, -, x, /, FFT |
| Dimensions (HWD) | 190 x 330 x 124 mm (7.5" x 13" x 4.9") | 163 x 360 x 124.1 mm (6.42" x 14.17" x 4.89") | 163 x 313 x 115.8 mm (6.42" x 12.32" x 4.6") |
| Weight | 3.7 kg (8.16 lbs) | 3.33 kg (7.40 lbs) | 2.78 kg (6.10 lbs) |

WAVESTATION AND ARBSTUDIO SPECIFICATIONS



ArbStudio



WaveStation

| | | |
|--|---|---|
| Number of Channels | 2 | 2 |
| Digital Pattern Generator | 18 Channels | N/A |
| Waveforms | Sine, Cosine, Triangle, Rectangle, Sawtooth, Ramp, Pulse, Sinc, Exponential, Sweep, DC, Noise, From File, Arbitrary | Sine, Square, Ramp, Pulse, Noise, Arbitrary: Stairup, Stairdown, Positive Pulse, Negative Pulse, Up Ramp, Down Ramp, Sinc, Gaussian, LogFall, LogRise, Sqrt, TwoTone, etc |
| Sine Waves | | |
| Frequency Range (Arbitrary) | 2 μ Hz - 125 MHz | 1 μ Hz - 160 MHz |
| Square Wave, Pulse (1 Vp-p) | | |
| Frequency Range | 2 μ Hz - 62.5 MHz | 1 μ Hz - 50 MHz |
| Triangle | | |
| Frequency Range | 2 μ Hz - 31.25 MHz | 1 μ Hz - 4 MHz |
| Ramp | | |
| Frequency Range | 2 μ Hz - 31.25 MHz | 1 μ Hz - 4 MHz |
| Sinc (Sin(x)/x) | | |
| Frequency Range | 2 μ Hz - 15.5 MHz | NA |
| Waveform Sequencing | | |
| Waveforms | All, From File, Arbitrary | All, From File, Arbitrary |
| Amplitude Resolution | < 1 mV | 1 mV |
| Output Impedance | Selectable: 50 Ω , Low or High Impedance | Selectable: 50 Ω , Hi-Z |
| Skew Between Channels (at Common Sample Rate) | | |
| Average (Typical) | < 300 ps | < 3 ns |
| Modulation | | |
| Amplitude Modulation | | |
| Modulation Type | Arbitrary, AM, ASK | AM, ASK |
| Carrier Waveform | All, From File, Arbitrary | Sine, Square, Ramp, Arbitrary (Except DC) |
| Modulating Waveforms | All, From File, Arbitrary | Sine, Square, Ramp, Arbitrary (2 mHz - 20 kHz) |
| Modulating Source | Internal | Internal / External |
| Modulating Waveform Sample Clock at Max. Sampling Rate | 0.46 S/s - 125 MS/s | 3.90625 MHz |
| Memory Size | 2047 entries | 4k x 12 bit |
| Phase/Frequency Modulation | | |
| Modulation Type | Arbitrary, FM / PM, FSK, PSK | FM / PM, FSK |
| Carrier Waveform | All, From File, Arbitrary | Sine, Square, Ramp, Arbitrary (Except DC) |
| Modulating Waveforms | All, From File, Arbitrary | Sine, Square, Ramp, Arbitrary (2 mHz - 20 kHz) |
| Modulating Source | Internal | Internal / External |
| Pulse Width Modulation | | |
| Carrier Waveform | Pulse | Pulse |
| Carrier Frequency | 100 mHz - 20 MHz | 500 μ Hz - 20 kHz |
| Duty Cycle Modulating Waveform | Sine, Triangle, Ramp, Noise, Manual | Sine, Square, Ramp, Arbitrary (Except DC) |
| Duty Cycle Modulating Frequency | 10 μ Hz - 6.67 MHz | 2 mHz - 20 kHz |
| Source | Internal | Internal / External |
| Pattern Generator Characteristics | | |
| | Available on Arbstudio 1102D | |
| Number of Channels | 18 | N/A |
| Vector Memory Depth | 1 Mpts / Ch | N/A |
| Acquisition Memory Depth | 2 Mpts / Ch | N/A |
| Update Frequency | 125 MS/s | N/A |
| Sampling Frequency | 250 MS/s | N/A |
| Direction Control | Per Ch programmable | N/A |
| Output Voltage Level | 1.2 V - 3.6 V | N/A |
| Trigger Levels | 31 | N/A |
| Operating Modes | 18 Ch Digital or 2 Ch Analog | N/A |

PROBES

The right probe is an essential tool for accurate signal capture and Teledyne LeCroy offers an extensive range of probes to meet virtually every probing need.

ZS Series High Impedance Active Probes

ZS4000, ZS2500,
ZS1500, ZS1000



The ZS Series probes provide high impedance and an extensive set of probe tips and ground accessories to handle a wide range of probing scenarios. The high 1 M Ω input resistance and low input capacitance mean this probe is ideal for all frequencies. The ZS Series probes provide full system bandwidth for all Teledyne LeCroy oscilloscopes having bandwidths of 4 GHz and lower.

Differential Probes (200 MHz – 1.5 GHz)

ZD1500, ZD1000,
ZD500, ZD200



High bandwidth, excellent common-mode rejection ratio (CMRR) and low noise make these active differential probes ideal for applications such as automotive development (e.g. FlexRay) and failure analysis, as well as wireless and data communication design. The ProBus interface allows sensitivity, offset and common-mode range to be displayed on the oscilloscope screen.

High Voltage Differential Probes

HVD3102, HVD3106,
HVD3106-6M, HVD3206,
HVD3605, AP031



HVD Series high voltage differential probes permit measurements on power electronics circuits with floating voltages without reference to the ground, allowing the oscilloscope to be safely grounded. Excellent CMRR is provided at high frequencies and is combined with low inherent noise, high offset voltage capabilities, and high DC gain accuracy to make them an ideal choice for probing high voltage and floating control signals in single and three-phase power electronics designs.

High Voltage Passive Probes

HVP120, PPE1.2KV, PPE2KV,
PPE4KV, PPE5KV, PPE6KV



High voltage probes are suitable for a wide range of applications where high-voltage measurements must be made safely and accurately. There are several fixed-attenuation probes covering a range from 1 kV to 6 kV and varying transient overvoltage ratings. All of these high voltage probes feature a spring loaded probe tip and a variety of standard accessories to make probing high voltages safe and easy. Additionally, all of the high voltage probe have a probe sense pin to automatically configure the oscilloscope for use with the probe.

Current Probes

CP030, CP030A,
CP031, CP031A,
CP150, CP500, DCS015



Available current probes reach bandwidths of 100 MHz, peak currents of 700 A and sensitivities of 1 mA/div. Use multiple current probes to make measurements on three-phase systems or a single current probe with a voltage probe to make instantaneous power measurements. Teledyne LeCroy current probes enable the design and testing of switching power supplies, motor drives, electric vehicles, and uninterruptible power supplies.

Probe Adapters

TPA10, CA10



Probe adapters provide simple and easy interface of third-party probes as well as change between the different Teledyne LeCroy Oscilloscope input and cable types (ProBus, ProLink, K/2.92 mm, BNC and SMA). Depending on the adapters, changing between the Teledyne LeCroy Oscilloscope's input type may have an effect on the overall performance of the channel.

ORDERING INFORMATION

Product Description Product Code

HDO4000 Oscilloscopes

| | |
|---|------------|
| 200 MHz, 2.5 GS/s, 2 Ch, 12.5 Mpts/Ch 12-bit HD Oscilloscope with 12.1" Color WXGA Touch Display | HDO4022 |
| 200 MHz, 2.5 GS/s, 4 Ch, 12.5 Mpts/Ch 12-bit HD Oscilloscope with 12.1" Color WXGA Touch Display | HDO4024 |
| 350 MHz, 2.5 GS/s, 2 Ch, 12.5 Mpts/Ch 12-bit HD Oscilloscope with 12.1" Color WXGA Touch Display | HDO4032 |
| 350 MHz, 2.5 GS/s, 4 Ch, 12.5 Mpts/Ch 12-bit HD Oscilloscope with 12.1" Color WXGA Touch Display | HDO4034 |
| 500 MHz, 2.5 GS/s, 4 Ch, 12.5 Mpts/Ch 12-bit HD Oscilloscope with 12.1" Color WXGA Touch Display | HDO4054 |
| 1 GHz, 2.5 GS/s, 4 Ch, 12.5 Mpts/Ch 12-bit HD Oscilloscope with 12.1" Color WXGA Touch Display | HDO4104 |
| 200 MHz, 2.5 GS/s, 2+16ch, 12.5 Mpts/Ch 12-bit HD Mixed Signal Oscilloscope w/ 12.1" Color WXGA Display | HDO4022-MS |
| 200 MHz, 2.5 GS/s, 4+16ch, 12.5 Mpts/Ch 12-bit HD Mixed Signal Oscilloscope w/ 12.1" Color WXGA Display | HDO4024-MS |
| 350 MHz, 2.5 GS/s, 2+16ch, 12.5 Mpts/Ch 12-bit HD Mixed Signal Oscilloscope w/ 12.1" Color WXGA Display | HDO4032-MS |
| 350 MHz, 2.5 GS/s, 4+16ch, 12.5 Mpts/Ch 12-bit HD Mixed Signal Oscilloscope w/ 12.1" Color WXGA Display | HDO4034-MS |
| 500 MHz, 2.5 GS/s, 4+16ch, 12.5 Mpts/Ch 12-bit HD Mixed Signal Oscilloscope w/ 12.1" Color WXGA Display | HDO4054-MS |
| 1 GHz, 2.5 GS/s, 4+16ch, 12.5 Mpts/Ch 12-bit HD Mixed Signal Oscilloscope w/ 12.1" Color WXGA Display | HDO4104-MS |

WaveSurfer 10 Oscilloscopes

| | |
|---|----------------|
| 1 GHz, 5 GS/s, 4 Ch, 10 Mpts/Ch DSO with 10.4" Touch Screen Display. 10 GS/s, 20 Mpts Interleaved | WaveSurfer10 |
| 1 GHz, 10 GS/s, 4 Ch, 16 Mpts/Ch DSO with 10.4" Touch Screen Display. 10 GS/s, 32 Mpts Interleaved includes WS10-ADT option | WaveSurfer 10M |

WaveSurfer 3000 Oscilloscopes

| | |
|---|-----------------|
| 200 MHz, 4 GS/s, 2 Ch, 10 Mpts/Ch with 10.1" Touch screen Display | WaveSurfer 3022 |
| 200 MHz, 4 GS/s, 4 Ch, 10 Mpts/Ch with 10.1" Touch screen Display | WaveSurfer 3024 |
| 350 MHz, 4 GS/s, 4 Ch, 10 Mpts/Ch with 10.1" Touch screen Display | WaveSurfer 3034 |
| 500 MHz, 4 GS/s, 4 Ch, 10 Mpts/Ch with 10.1" Touch screen Display | WaveSurfer 3054 |
| 750 MHz, 4 GS/s, 4 Ch, 10 Mpts/Ch with 10.1" Touch screen Display | WaveSurfer 3074 |

WaveJet Touch Oscilloscopes

| | |
|---|--------------|
| 350 MHz, 1 GS/s, 4 Ch, 2.5 Mpts/Ch with 7.5" Touch screen Display; 2 GS/s, 5 Mpts Interleaved | WaveJet 334T |
| 500 MHz, 1 GS/s, 4 Ch, 2.5 Mpts/Ch with 7.5" Touch screen Display; 2 GS/s, 5 Mpts Interleaved | WaveJet 354T |

Product Description Product Code

WaveAce Oscilloscopes

| | |
|---|--------------|
| 40 MHz, 500 MS/s, 2 Ch, 1 Mpts/Ch with 7" Color WQVGA Display. 1 GS/s Interleaved, 1 M Ω Input | WaveAce 1001 |
| 60 MHz, 500 MS/s, 2 Ch, 1 Mpts/Ch with 7" Color WQVGA Display. 1 GS/s Interleaved, 1 M Ω Input | WaveAce 1002 |
| 100 MHz, 500 MS/s, 2 Ch, 1 Mpts/Ch with 7" Color WQVGA Display. 1 GS/s Interleaved, 1 M Ω Input | WaveAce 1012 |
| 70 MHz, 1 GS/s, 2 Ch, 12 kpts/Ch with 7" Color WQVGA Display. 24 kpts, 2 GS/s Interleaved, 1 M Ω Input | WaveAce 2002 |
| 70 MHz, 1 GS/s, 4 Ch, 12 kpts/Ch with 7" Color WQVGA Display. 24 kpts, 2 GS/s Interleaved, 1 M Ω Input | WaveAce 2004 |
| 100 MHz, 1 GS/s, 2 Ch, 12 kpts/Ch with 7" Color WQVGA Display. 24 kpts, 2 GS/s Interleaved, 1 M Ω Input | WaveAce 2012 |
| 100 MHz, 1 GS/s, 4 Ch, 12 kpts/Ch with 7" Color WQVGA Display. 24 kpts, 2 GS/s Interleaved, 1 M Ω Input | WaveAce 2014 |
| 200 MHz, 1 GS/s, 2 Ch, 12 kpts/Ch with 7" Color WQVGA Display. 24 kpts, 2 GS/s Interleaved, 50/1 M Ω Input | WaveAce 2022 |
| 200 MHz, 1 GS/s, 4 Ch, 12 kpts/Ch with 7" Color WQVGA Display. 24 kpts, 2 GS/s Interleaved, 50/1 M Ω Input | WaveAce 2024 |
| 300 MHz, 1 GS/s, 2 Ch, 12 kpts/Ch with 7" Color WQVGA Display. 24 kpts, 2 GS/s Interleaved, 50/1 M Ω Input | WaveAce 2032 |
| 300 MHz, 1 GS/s, 4 Ch, 12 kpts/Ch with 7" Color WQVGA Display. 24 kpts, 2 GS/s Interleaved, 50/1 M Ω Input | WaveAce 2034 |

Logic Studio Logic Analyzer

| | |
|--|----------------|
| 16 Channel, 1 GS/s, 100 MHz USB Logic Analyzer | LogicStudio 16 |
|--|----------------|

ArbStudio Arbitrary Waveform Generators

| | |
|---|-----------------|
| 2 Ch 16-bit 1 GS/s Arbitrary Waveform Generator | ArbStudio 1102 |
| 2 Ch 16-bit 1 GS/s Arbitrary Waveform and Digital Pattern Generator | ArbStudio 1102D |

WaveStation Function/Arbitrary Waveform Generators

| | |
|---|------------------|
| 10 MHz, 2 Ch, 14-bit, 125 MS/s Function/Arbitrary Waveform Generator with 3.5" Display | WaveStation 2012 |
| 25 MHz, 2 Ch, 14-bit, 125 MS/s Function/Arbitrary Waveform Generator with 3.5" Display | WaveStation 2022 |
| 50 MHz, 2 Ch, 14-bit, 125 MS/s Function/Arbitrary Waveform Generator with 3.5" Display | WaveStation 2052 |
| 80 MHz, 2 Ch, 14 bit, 500 MS/s Function/Arbitrary Waveform Generator with 4.3" Display | WaveStation 3082 |
| 120 MHz, 2 Ch, 14 bit, 500 MS/s Function/Arbitrary Waveform Generator with 4.3" Display | WaveStation 3122 |
| 160 MHz, 2 Ch, 14 bit, 500 MS/s Function/Arbitrary Waveform Generator with 4.3" Display | WaveStation 3162 |

ORDERING INFORMATION

Product Description Product Code

Probes for HDO4000, WaveSurfer 10 and WaveSurfer 3000

Passive Probes

| | |
|---|-------|
| 500 MHz 10:1, 10 M Ω Passive Probe for 1 GHz WaveSurfer 10 Oscilloscopes | PP011 |
| 250 MHz Passive Probe for HDO4000, 10:1, 10 M Ω | PP017 |
| 500 MHz Passive Probe for HDO4000, 10:1, 10 M Ω | PP018 |
| 250 MHz Passive Probe for WaveSurfer 3000, 10:1, 10 M Ω | PP019 |
| 500 MHz Passive Probe for WaveSurfer 3000, 10:1, 10 M Ω | PP020 |

Active Probes

| | |
|--|--------|
| 1.0 GHz, 0.9 pF, 1 M Ω Active Voltage Probe | ZS1000 |
| 1.5 GHz, 0.9 pF, 1 M Ω Active Voltage Probe | ZS1500 |

Differential Probes

| | |
|--|---------------|
| 1kV, 25 MHz High Voltage Differential Probe | HVD3102 |
| 1kV, 25 MHz High Voltage Differential Probe without tip Accessories | HVD3102-NOACC |
| 1,500 V, 80 MHz, High Voltage Differential Probe with 6m cable | HVD3106-6M |
| 1,500 V, 120 MHz High-Voltage Differential Probe | HVD3106 |
| 1kV, 120 MHz High Voltage Differential Probe without tip Accessories | HVD3106-NOACC |
| 2kV, 120 MHz High Voltage Differential Probe | HVD3206 |
| 6kV, 100 MHz High Voltage Differential Probe | HVD3605 |
| 200 MHz, 3.5 pF, 1 M Ω Active Differential Probe | ZD200 |
| 500 MHz, 1.0 pF, 1 M Ω Active Differential Probe | ZD500 |
| 1 GHz, 1.0 pF, 1 M Ω Active Differential Probe | ZD1000 |
| 1.5 GHz, 1.0 pF, 1 M Ω Active Differential Probe | ZD1500 |

Differential Amplifiers

| | |
|---|---------|
| 1 Ch, 100 MHz Differential Amplifier | DA1855A |
| 100:1 or 10:1 Selectable, 250 MHz Passive Differential Probe Pair | DXC100A |

Current Probes

| | |
|---|--------|
| 30 A; 50 MHz Current Probe – AC/DC; 30 A _{rms} ; 50 A _{peak} Pulse | CP030 |
| 30A; 50 MHz High Sensitivity Current Probe - AC/DC; 30 A _{rms} ; 50 A _{peak} Pulse | CP030A |
| 30 A; 100 MHz Current Probe – AC/DC; 30 A _{rms} ; 50 A _{peak} Pulse | CP031 |
| 30A; 100 MHz High Sensitivity Current Probe - AC/DC; 30 A _{rms} ; 50 A _{peak} Pulse | CP031A |
| 150 A; 10 MHz Current Probe – AC/DC; 150 A _{rms} ; 500 A _{peak} Pulse | CP150 |
| 500 A; 2 MHz Current Probe – AC/DC; 500 A _{rms} ; 700 A _{peak} Pulse | CP500 |
| Deskew Calibration Source for Current and Differential Probes | DCS015 |

High-Voltage Probes

| | |
|--|----------|
| 100:1 400 MHz 50 M Ω 1 kV High-voltage Probe | HVP120 |
| 10:1/100:1 200/300 MHz 50 M Ω High-Voltage Probe 600 V/1.2 kV Max. Volt. DC | PPE1.2KV |
| 100:1 400 MHz 50 M Ω 2 kV High-Voltage Probe | PPE2KV |
| 100:1 400 MHz 50 M Ω 4 kV High-Voltage Probe | PPE4KV |
| 1000:1 400 MHz 50 M Ω 5 kV High-Voltage Probe | PPE5KV |
| 1000:1 400 MHz 50 M Ω 6 kV High-Voltage Probe | PPE6KV |

Probe Adapters

| | |
|--|-------|
| TekProbe to ProBus Probe Adapter | TPA10 |
| Programmable Current Sensor to ProBus Adapter for use with third party current sensors | CA10 |

(Visit teledynelecroy.com for oscilloscope compatibility)

Product Description Product Code

Probes for WaveJet Touch and WaveAce 1000 / 2000

Passive Probes

| | |
|---|--------|
| 500 MHz 10:1, 10 M Ω Passive Probe for 350 MHz and 500 MHz WaveJet Touch Oscilloscopes | PP006A |
| 300 MHz, 10:1, 10 M Ω Passive Probe for WaveAce Oscilloscopes | PP016 |

Differential Probes

| | |
|--|-------|
| 700 V, 15 MHz High-Voltage Differential Probe ($\div 10$, $\div 100$) | AP031 |
|--|-------|

High-Voltage Probes

| | |
|--|----------|
| 400 MHz, High Voltage Passive Probe | HVP120 |
| 10:1/100:1 200/300 MHz 50 M Ω High-Voltage Probe 600 V/1.2 kV Max. Volt. DC | PPE1.2KV |
| 100:1 400 MHz 50 M Ω 2 kV High-Voltage Probe | PPE2KV |
| 100:1 400 MHz 50 M Ω 4 kV High-Voltage Probe | PPE4KV |
| 1000:1 400 MHz 50 M Ω 5 kV High-Voltage Probe | PPE5KV |
| 1000:1 400 MHz 50 M Ω 6 kV High-Voltage Probe | PPE6KV |



1-800-5-LeCroy
teledynelecroy.com

Local sales offices are located throughout the world.
Visit our website to find the most convenient location.