T3DSOH1000 / T3DSOH1000-ISO

Handheld Oscilloscope

100 MHz/200 MHz, Isolated, CAT III
Dedicated 6000 Count DMM
Data logger 1 Sa/s to 25 kSa/s

Multifunctional tool suitable for harsh environments

● 1000-ISO series offers two independent floating isolated inputs.	✓ Ideal for simultaneous measurement of independently floating signals and to reduce accidental short circuits.
● Large bright 5.6-inch TFT -LCD display with 640 * 480 resolution.	✓ Large bright display makes it easy to view data in the field.
● IP51 rated dust and drip-proof housing.	✓ Safety rated for industrial environments.
● **Long Capture** – 6 Mpts/Ch and 12 Mpts interleaved.	✓ Capture more time and show more waveform detail.
● **True-RMS measurements** – All AC Voltage and Current ranges give True-RMS readings.	✓ Excellent accuracy regardless of the waveform shape.
● Serial Bus Decoders for I^2C, SPI, UART, CAN, LIN as standard.	✓ Debug serial buses directly in your Oscilloscope at no extra cost.
● 3 Years Warranty as standard.	✓ Reliable product gives peace of mind.

The Teledyne Test Tools DSOH1000 and DSOH1000-ISO handheld oscilloscopes integrate oscilloscope, recorder and multimeter functions into a convenient and portable design. Weighing only 1.7 kg (3.8 lb), the battery-powered DSOH series can be used for field testing, automotive, R&D, and industrial maintenance.

Superb Performance

- 100 MHz and 200 MHz Bandwidth models
- Max Sample rate of 1 GSa/s
- Waveform capture rates up to 100,000 wfm/s
- Vertical range of 2 mV/div to 100 V/div
- Up to 12 Mpts of Acquisition memory
- Sequence acquisition mode (up to 80,000 segments)
- History waveform record (History) function wtih up to 80,000 frames
- 38 Automatic measurement parameters
- Supports 256-level intensity grading and color temperature display modes
- Intelligent trigger: Edge, Slope, Pulse Width, Window, Runt, Interval, Time out (dropout), Pattern
- Serial bus triggering and decoding (Standard) for IIC, SPI, UART, CAN and LIN protocols
- Video trigger/HDTV

Oscilloscope inputs
CAT III 600 V/CAT II 1000 V
Isolated channels*

5.6-inch TFT-LCD display
with 640 * 480 resolution

1 Mpts FFT. Support
Peaks and Markers

Three dedicated buttons
to switch between different
instrument modes
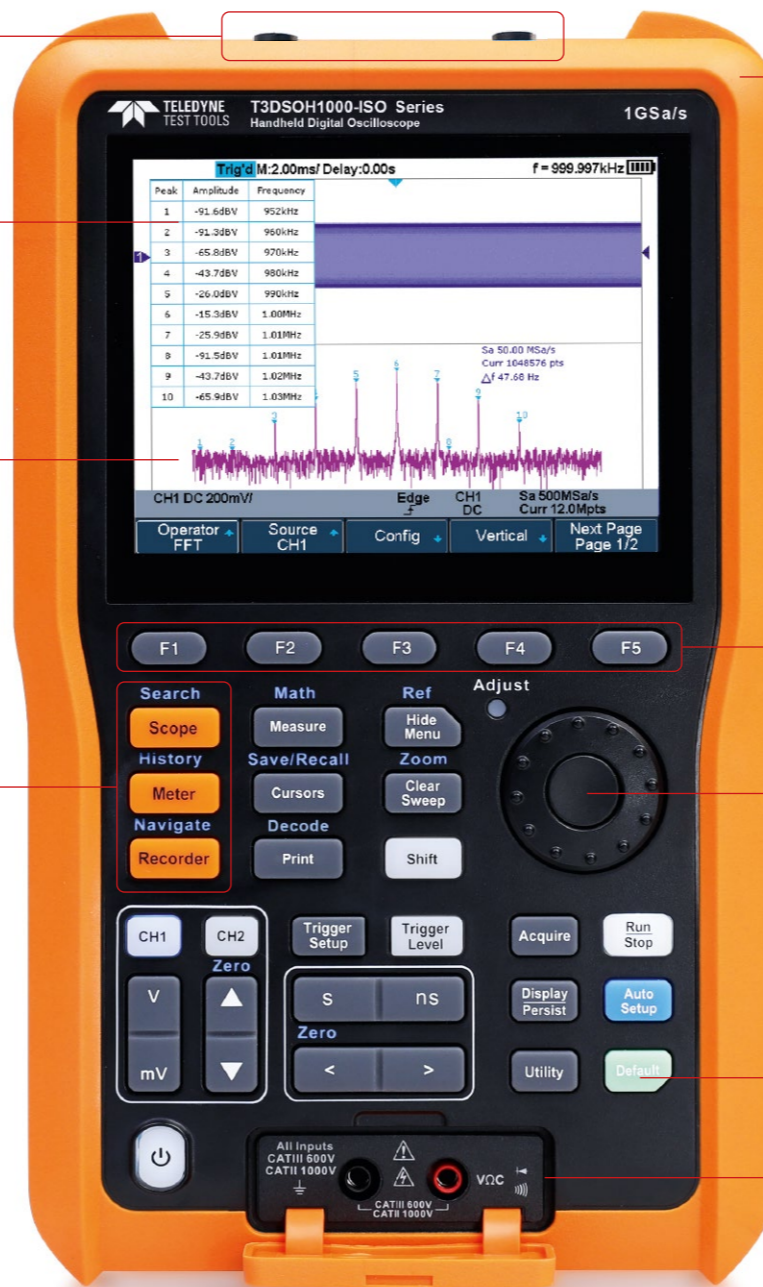
Dust and water resistant
outer case

Function keys to perform
corresponding functions
displayed above each
softkey

Multifunctional wheel for
easier and faster operation
in the field

Default key can be
customized for user settings
or factory "defaults"

Multimeter inputs

Robust design

- UL2054 certified lithium battery pack, 6900 mAh capacity, external charger
- Sealed IP51 dust and drip-proof housing
- Rubberized surface with large keys makes it easy to use with gloves

Excellent connectivity

- Interface types: Isolated USB Host, USB Device (MicroUSB – TMC)
- Supports SCPI remote control commands

## True RMS Digital Multimeter

- CAT III 600V/CAT II 1000V rated isolated inputs
- 6000 counts Digital Multimeter supports DCV, ACV, DCI, ACI, Resistance, Diode, Capacitance, Continuity test.
- True RMS AC Voltage/Current measurement multimeter
- Included current adaptors helps in current measurement up to 10 A

* Isolated channel is only available on T3DSOH1000-ISO Series

## 1 | 256-Level Intensity Grading and Color Temperature Display
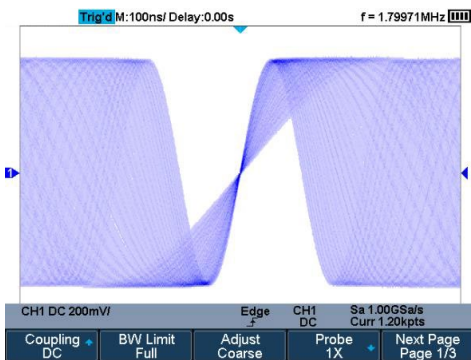
SPO display technology provides fast refresh rates. The resulting intensity-graded trace is brighter for events that occur with more frequency and dims when the events occur with less frequency.
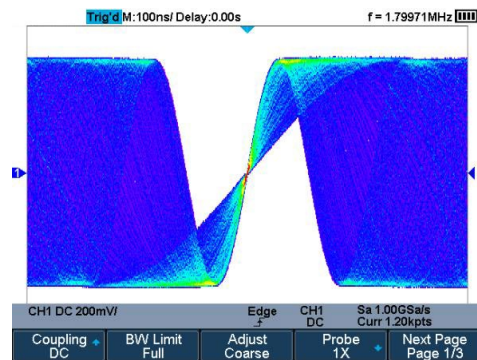
The color temperature display is similar to the intensity-graded trace function, but the trace occurrence is represented by different colors (color "temperature") as opposed to changes in the intensity of one color. Red colors represent events that occur more frequently, while blue is used to mark points that occur less frequently.

2 | Record Length of up to 12 Mpts
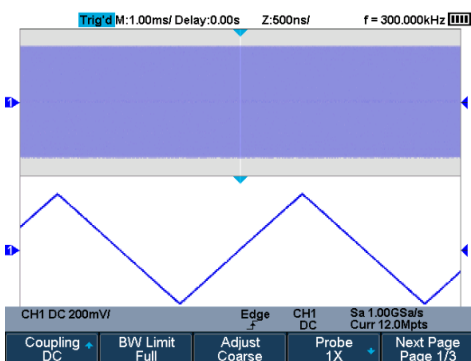
Using hardware-based Zoom technologies and max record length up to 12 Mpts, users can oversample to capture for longer periods at higher resolution and use the zoom feature to see more details within each signal.

3 | Waveform Capture Rate up to 400,000 wfm/s
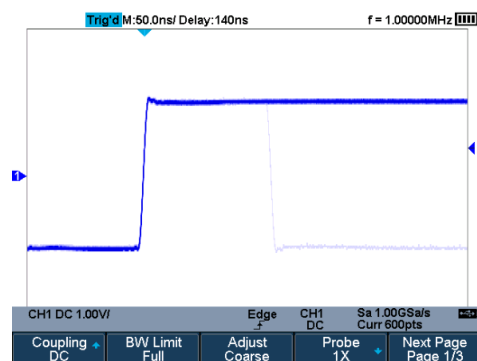
With a waveform capture rate of up to 400,000 wfm/s (sequence mode), the oscilloscope can easily capture unusual or low-probability events.

4 | Serial Bus Decoding Function
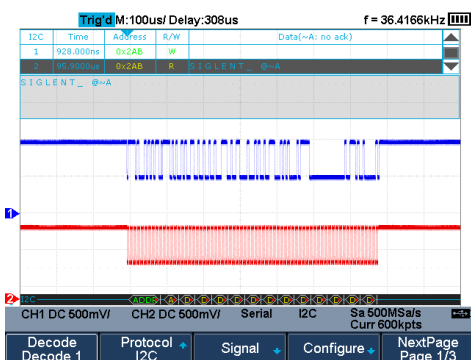
The T3DSOH displays thedecoding through the events list. Bus protocol information can be quickly and intuitively displayed in a tabular format.

5 | History Waveforms (History) Mode and Segmented Acquisition (Sequence)
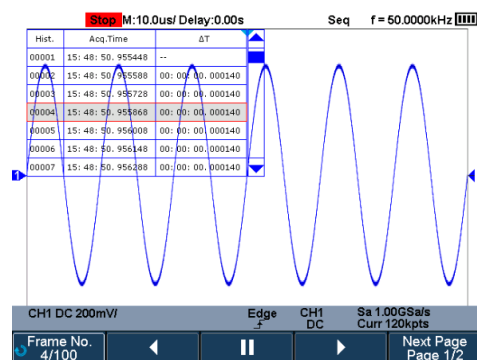
Playback the latest triggered events using the history function. Segmented memory collection will store trigger events into multiple (Up to 80,000) memory segments, each segment will store triggered waveforms and timestamps for each frame.

6 True measurement to 12 M points
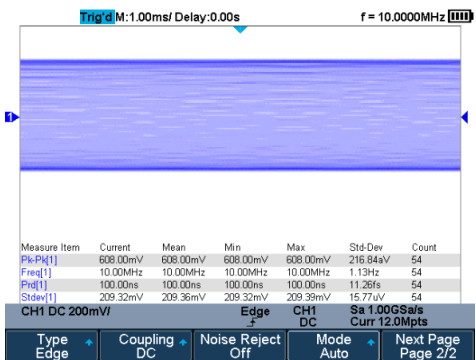
The T3DSOH series can measure all sampled data points up to 12 Mpts. This ensures the accuracy of measurements while the math co-processor decreases measurement time and increases ease-of-use.

7 Gate and Zoom Measurement

Through Gate and Zoom measurement, the user can specify an arbitrary interval of waveform data analysis and statistics. This helps avoid measurement errors that can be caused by invalid or extraneous data, greatly enhancing the measurements' validity and flexibility.

8 1 M points used to calculate the FFT

The new math co-processor enables FFT analysis of incoming signals using up to 1 M samples per waveform. This provides high-frequency resolution with a fast refresh rate. The FFT function also supports a variety of window functions so that it can adapt to different spectrum measurement needs. Support Peaks, Markers, a variety of numbers.

9 Measurement Logger
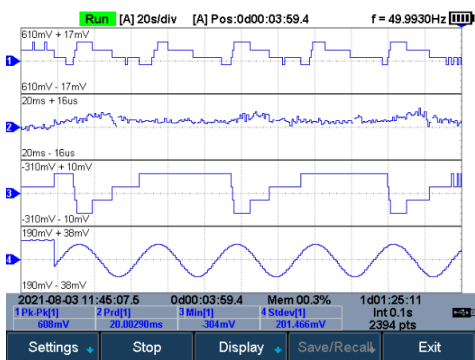
The measurement Logger is the mode of logging the measurement value for a long time. If the amount of measurement data is relatively small, to process quickly, the data is logged in memory. After stopping logging, the data can be saved into the internal flash or external U disk.

10 Search and Navigate

The T3DSOH series can search events specified by the user in a frame. It can also navigate by time (delay position) and historical frames.

11 6000 Counts Digital Multimeter
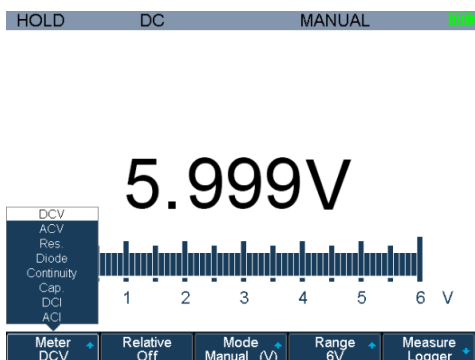
6000 count digital multimeter featured function of DCV, true RMS ACV, DCI, ACI, Diode, Resistance, Capacitance, and Continuity.

12 Adapter/Battery

Wall power using the supplied adapter

T3DSOH supports adapter power supply and battery power supply. After connecting the adapter, the battery enters into charging mode. The adapter provides a maximum 4 A output current.

Battery powered

T3DSOH uses a UL2054 certified lithium battery package. The battery capacity of 6900 mAh can guarantee long-term operation without an external power supply for up-to 5.5 hours (T3DSOH1000 series) and 4 hours (T3DSOH1000-ISO series). The battery supports an external charger to further meet the requirements of portability.

13 Connectivity

Right side of the T3DSOH series

T3DSOH supports USB Host, USB Device (Micro USB – TMC).

Left side of the T3DSOH series

SPECIFICATIONS

OSCILLOSCOPE

Model	T3DSOH1000	T3DSOH1000-ISO

Acquisition System

Sampling Rate (Max.)	1 GSa/s (single channel), 500 MSa/s (two channels)	
Memory Depth (Max.)	Max 12 Mpts/Ch (single channel), 6 Mpts/Ch (two channels)	
Peak Detect	2 ns	
Average	Averages: 4, 16, 32, 64, 128, 256, 512, 1024	
ERES	Enhance bits: 0.5, 1.5, 2, 2.5, 3	
Waveform interpolation	Sin(x)/x, Linear	

Input

Channels	2 channels	
Coupling	DC, AC, GND	
Impedance	DC: (1 MΩ ±2 %) ‖ (14 pF ±2 pF)	DC: (1 M Ω ±2 %) ‖ (14 pF ±2 pF)
Max. Input voltage [1]	CAT II 300 Vrms Between BNC Signal and Protecting Earth CAT II 30 Vrms Between BNC GND and Protecting Earth CAT II 300 Vrms Between BNC Signal and BNC GND	CAT III 600 Vrms, CAT II 1000 Vrms Between BNC Signal and Protecting Earth CAT III 600 Vrms, CAT II 1000 Vrms Between BNC GND and Protecting Earth CAT III 300 Vrms Between BNC Signal and BNC GND
CH to CH Isolation	DC-Max BW: >40 dB	
Probe attenuation	0.1X, 0.2X, 0.5X, 1X, 2X, 5X, 10X......1000X, 2000X, 5000X, 10000X, Custom	

Vertical System

Bandwidth (-3 dB) [2]	≥ 200 MHz (T3DSO1202) ≥ 100 MHz (T3DSO1102)	≥ 200 MHz (T3DSO1202-ISO) ≥ 100 MHz (T3DSO1102-ISO)
Vertical Resolution	8-bit	
Vertical Scale (Probe 1X)	2 mV/div−100 V/div (1-2-5 sequence)	5 mV/div−100 V/div (1-2-5 sequence)
Offset Range (Probe 1X)	2 mV − 296 mV: ± 5 V 302 mV − 7.5 V: ± 80 V 7.6 V − 100 V: ± 400 V	
Bandwidth limit [2]	20 MHz ± 40 %	
Bandwidth Flatness [2]	DC − 10 % (BW): ± 1 dB 10 % − 50 % (BW): ± 2 dB 50 % − 100 % (BW): + 2 dB/-3 dB	
Low-frequency response (AC coupling -3 dB)	≤ 2 Hz (at input BNC)	
Noise/SNR	2 mV/div: > 24 dB 5 mV/div: > 25 dB ≥ 10 mV/div: > 35 dB P-P Noise ≤ 15 SDEV Spec	
SFDR including harmonics	≥ 30 dB	≥ 28 dB
CMRR		> 100 dB DC > 50 dB to AC 1 MHz
DC Gain Accuracy	≤ ± 3 %: ≥ 10 mV/div ≤ ± 4 %: < 10 mV/div	
Offset Accuracy	± (1.5 % * Offset + 1.5 % * 8 * div + 5 mV)	± (1.5 % * Offset + 1.5 % * 8 * div + 5 mV)
Rise time [2]	Typical 1.7 ns (T3DSO1202) Typical 3.5 ns (T3DSO1102)	Typical 2.0 ns (T3DSO1202-ISO) Typical 3.5 ns (T3DSO1102-ISO)
Overshoot (500 ps Pulse) [2]	typical 12 %	typical 18 %

[1] According to IEC61010-1, a voltage higher than 30 Vrms is a dangerous voltage, necessary protection must be taken to prevent personal injury. Please read the user's manual for details.

[2] The T3DSOH series handheld oscilloscope featured 1 MΩ input impedance. Bandwidth and pulse response must be verified with an external 50 Ω adapter, to guarantee signal integrity at higher frequency.

SPECIFICATIONS

Horizontal System

Timebase Scale	1.0 ns/div − 100 s/div
Channel Skew	< 300 ps
Waveform Capture Rate	Up to 100,000 wfm/s (normal mode), 400,000 wfm/s (sequence mode)
Intensity grading	256 Levels
Display Format	Y-T, X-Y, Roll
Timebase Accuracy	±25 ppm
Roll Mode	50 ms/div-100 s/div (1-2-5 sequence)

Trigger System

Mode	Auto, Normal, Single
Level	Internal: ±4.5 div from the center of the screen
Hold off range	80 ns − 1.5 s
Coupling	AC DC LFRJ HFRJ Noise RJ
Coupling Frequency Response	DC: Passes all components of the signal AC: Blocks DC components and attenuates signals below 8 Hz LFRJ: Blocks the DC component and attenuates the low-frequency components below 2 MHz HFRJ: Attenuates the high-frequency components above 1.2 MHz
Accuracy (typical)	Internal: ± 0.2 div
Sensitivity	DC − Max BW: 0.8 div
Jitter	< 100 ps
Displacement	Pre-Trigger: 0 − 100 % Memory Delay Trigger: 0 to 10,000 div
Edge Trigger	
Slope	Rising, Falling, Rising & Falling
Source	All channels
Slope Trigger	
Slope	Rising, Falling
Limit Range	<, >, < >, > <
Source	All channels
Time Range	2 ns − 4.2 s
Resolution	1 ns
Pulse Width Trigger	
Polarity	+wid , -wid
Limit Range	<, >, < >, > <
Source	All channels
Pulse Range	2 ns − 4.2 s
Resolution	1 ns
Video Trigger	
Signal Standard	NTSC, PAL, 720p / 50, 720p / 60, 1080p / 50,1080p / 60,1080i / 50,1080i / 60, Custom
Source	All channels
Sync	Any, Select
Trigger condition	Line, Field
Window Trigger	
Window Type	Absolute, Relative
Source	All channels
Interval Trigger	
Slope	Rising, Falling
Limit Range	<, >, < >, > <
Source	All channels
Time Range	2 ns − 4.2 s
Resolution	1 ns

Dropout Trigger	
Timeout Type	Edge, State
Source	All channels
Slope	Rising, Falling
Time Range	2 ns − 4.2 s
Resolution	1 ns
Runt Trigger	
Polarity	+wid , -wid
Limit Range	<, >, < >, > <
Source	All channels
Time Range	2 ns − 4.2 s
Resolution	1 ns
Pattern Trigger	
Pattern Setting	Invalid, Low, High
Logic	AND, OR, NAND, NOR
Source	All channels
Limit Range	<, >, < >, > <
Time Range	2 ns − 4.2 s
Resolution	1 ns

Serial Trigger

I²C Trigger	
Condition	Start, Stop, Restart, No Ack, EEPROM, 7-bits Address & Data, 10-bits Address & Data, Data Length
Source(SDA/SCL)	All channels
Data format	Hex
Limit Range	EEPROM: =, >, <
Data Length	EEPROM: 1 byte Addr & Data: 1−2 byte Data Length: 1−12 byte
R/W bit	Addr & Data: Read, Write, Do not care
SPI Trigger	
Condition	Data
Source(CS/CL/Data)	All channels
Data format	Binary
Data Length	4-96-bit
Bit Value	0, 1, X
Bit Order	LSB, MSB
UART Trigger	
Condition	Start, Stop, Data, Parity Error
Source(RX/TX)	All channels
Data format	Hex
Limit Range	=, >, <
Data Length	1 byte
Data Width	5, 6, 7, 8-bits
Parity Check	None, Odd, Even, Space, Mark
Stop Bit	1, 1.5, 2-bits
Idle Level	High, Low
Baud Rate (Selectable)	600 / 1200 / 2400 / 4800 / 960019200 / 38400 / 57600 / 115200 / Custom bit/s
Baud Rate (Custom)	300 − 5000000 bit/s

SPECIFICATIONS

CAN Trigger	
Condition	Start, Remote, ID, ID + Data, Error
Source	All channels
ID	STD (11-bits), EXT (29-bit)
Data Format	Hex
Data Length	1−2 byte
Baud Rate	5 k / 10 k / 20 k / 50 k / 100 k / 125 k / 250 k / 500 k / 800 k / 1 M / Custom bit/s
LIN Trigger	
Condition	Break, Frame ID, ID + Data, Error
Source	All channels
ID	1 byte
Data Format	Hex
Data Length	1−2 byte
Baud Rate (Selectable)	600 / 1200 / 2400 / 4800 / 9600 / 19200 / Custom bit/s
Baud Rate (Custom)	300 bit/s − 20 Mbit/s

Search

Event	Edge, Slope, Pulse, Interval, Runt
Event Number	Y-T: 600 ROLL: No limitation Stop After ROLL: 600

Serial Decoder

Decoders	2
I²C	
Signal	SCL, SDA
Address	7, 10 bits
Threshold	-4.5 − 4.5 div
List	1−7 lines
SPI	
Signal	SCL, MISO, MOSI, CS (2 channel scopes can only use 2 signal) identifiers
Edge Select	Rising, Falling
Idle Level	Low, High
Bit Order	MSB, LSB
Threshold	-4.5 − 4.5 div
List	1−7 lines
UART	
Signal	RX, TX
Data Width	5, 6, 7, 8 bits
Parity Check	None, Odd, Even, Space, Mark
Stop Bit	1, 1.5, 2 bits
Idle Level	Low, High
Threshold	-4.5 − 4.5 div
List	1−7 lines
CAN	
Signal	CAN_H, CAN_L
Source	CAN_H, CAN_L, CAN_H-CAN_L
Threshold	-4.5 − 4.5 div
List	1−7 lines
LIN	
LIN Specification Package Revision	Ver1.3, Ver2.0
Threshold	-4.5 − 4.5 div
List	1−7 lines

SPECIFICATIONS

Measurement

Source	All channels, All channels in Zoom, Math, All References, History	
Number of Measurements	Display 4 measurements at the same time. 5 measurements are displayed in the statistics table.	
Measurement Range	Screen or Gate region	
Measurement Parameters	38 Types	
Vertical	Max	Highest value in input waveform
	Min	The lowest value of the input waveform
	Pk-Pk	Difference between maximum and minimum data values
	Ampl	Difference between top and base in a bimodal signal, or between max and min in a unimodal signal
	Top	Value of most probable higher state in a bimodal waveform
	Base	Value of most probable lower state in a bimodal waveform
	Mean	Average of all data values
	Cmean	Average of data values in the first cycle
	Stdev	Standard deviation of all data values
	Cstd	Standard deviation of all data values in the first cycle
	VRMS	Root mean square of all data values
	Crms	Root mean square of all data values in the first cycle
	FOV	Overshoot after a falling edge; (base − min)/Amplitude
	FPRE	Overshoot before a falling edge; (max − top)/Amplitude
	ROV	Overshoot after a rising edge; (max − top)/Amplitude
	RPRE	Overshoot before a rising edge; (base − min)/Amplitude
	Level@X	the voltage value of the trigger point
Horizontal	Period	Time between the middle threshold points of two consecutive, like-polarity edges
	Freq	Reciprocal of period
	+Wid	Width measured at 50 % level and positive slope
	-Wid	Width measured at 50 % level and negative slope
	Rise Time	Duration of rising edge from 10−90 %
	Fall Time	Duration of falling edge from 90−10 %
	Bwid	Time from the first rising edge to the last falling edge, or the first falling edge to the last rising edge at the 50 % crossing
	+Duty	Time difference between the 50 % threshold of a rising edge to the 50 % threshold of the next falling edge of the pulse
	-Duty	Time difference between the 50 % threshold of a falling edge to the 50 % threshold of the next rising edge of the pulse
	Delay	Time from the trigger to the first transition at the 50 % crossing
	Time@Level	Time from the trigger to each rising edge at the 50 % crossing. When Statistics is Off, it shows the time from the trigger to the last rising edge at the 50 % crossing. When Statistics is On, it shows the Mean, Min, Max, Standard Deviation of time from the trigger to each rising edge at the 50 % crossing in multiple frames (number = Count). The Current shows the time of the current frame from the trigger to the last rising edge at the 50 % crossing.
Delay	Phase	Phase difference between two edges
	FRFR	Time from the first rising edge of channel A to the following first rising edge of channel B
	FRFF	Time from the first rising edge of channel A to the following first falling edge of channel B
	FFFR	Time from the first falling edge of channel A to the following first rising edge of channel B
	FFFF	Time from the first falling edge of channel A to the following first falling edge of channel B
	FRLR	Time from the first rising edge of channel A to the last rising edge of channel B
	FRLF	Time from the first rising edge of channel A to the last falling edge of channel B
	FFLR	Time from the first falling edge of channel A to the last rising edge of channel B
	FFLF	Time from the first falling edge of channel A to the last falling edge of channel B
	Skew	Time of source A edge minus time of nearest source B edge

SPECIFICATIONS

Cursors	Manual: Time X1, X2, (X1−X2), (1/ΔT) Voltage Y1, Y2, (Y1−Y2) Track: Time X1, X2, (X1−X2)
Statistics	Current, Mean, Min, Max, Stdev, Count
Counter	Hardware 6-digit counter (channels are selectable)

Math

Operation	+, -, *, /, FFT, d/dt, ∫dt, √
FFT window	Rectangular, Blackman, Hanning, Hamming, Flattop
FFT display	Full Screen, Split, Exclusive

Recorder

Sample Logger	
Source	CH1, CH2, CH1 & CH2
Sample Rate	1 Sa/s − 25 kSa/s (1-2-5 sequence)
Memory Depth	Internal memory 50 MB, Support External memory to 2 GB
Log Time with Max sample rate	Approx. 23 mins in single-channel mode, 11 mins in two-channels mode with internal memory Approx. 22 hours in single-channel mode, 11 hours in two-channel mode with external memory
Data Format	Binary
Measurement Logger	
Source	Measurement, Meter, Measurement & Meter
Log Interval	0.1 s − 10min
Number of simultaneous logging channels	4
Memory Depth	Approx.3.6 Msamples in single-channel mode, 900 ksamples in four-channel mode
Log Time with Minimum Interval	Approx.100 hours
Data Format	Binary
Export Data Format	Binary, csv, MATLAB

Multimeter (DMM) [1]

Maximum Resolution	6000 Counts
Maximum Input Voltage (T3DSOH1000)	CAT III 300 Vrms CAT II 600 Vrms
Maximum Input Voltage (T3DSOH1000-ISO)	CAT III 600 Vrms CAT II 1000 Vrms
Maximum Input Voltage (For adapter SCD10A, SCD600MA)	CAT III 60 Vrms

Function	Range	Resolution	Accuracy [4]
DC Voltage	60.00 mV	10 µV	(± 1 % ± 15 digit)
	600.0 mV	100 µV	(± 1 % ± 5 digit)
	6.000 V	1 mV	
	60.00 V	10 mV	
	600.0 V	100 mV	
	1000 V [3]	1 V	(± 1.5 % ± 5 digit)
AC Voltage (45 Hz 400 Hz)	60.00 mV	10 µV	(± 1 % ± 15 digit)
	600.0 mV	100 µV	(±1 % ± 5 digit)
	6.000 V	1 mV	
	60.00 V	10 mV	
	600.0 V	100 mV	
	750 V [3]	1 V	(± 1.5 % ± 5 digit)
DC Current [2] [5]	60.00 mA	10 µA	(± 4 % ± 10 digit)
	600.0 mA	100 µA	
	6.000 A	1 mA	(± 5 % ± 5 digit)
	10.00 A	10 mA	

[1] The spec for DMM functions are calibrated and verified in Battery-Power mode, Temperature range [23 °C ± 5 °C], warm-up for 0.5 hour.
[2] For rank A (ampere) range, the measurement time should be less than 10s, the interval time should be more than 15 minutes.
[3] This spec is for T3DSO1000-ISO only, The maximum input voltage is 600V (DC/AC) for the T3DSO1000 series.
[4] ± of reading % ± range error. For AC signals, the input signal should be greater than 10 % of range.
[5] 60 mA, 600 mA specification along with adapter SCD600MA; 6 A, 10 A specification along with adapter SCD10A.

SPECIFICATIONS

Function	Range	Resolution	Accuracy [4]
AC Current [2] [5] (45 Hz − 400Hz)	60.00 mA	10 µA	(± 4 % ± 10 digit)
	600.0 mA	100 µA	
	6.000 A	1 mA	(± 5 % ± 5 digit)
	10.00 A	10 mA	
Resistance	600.0 Ω	0.1 Ω	
	6.000 kΩ	1 Ω	
	60.00 kΩ	10 Ω	(± 1 % ± 5 digit)
	600.0 kΩ	100 Ω	
	6.000 MΩ	1 kΩ	
	60.00 MΩ	10 kΩ	(± 4 % ± 5 digit)
Capacitance	40.00 nF	0.01 nF	(± 5 % ± 50 digit)
	400.0 nF	0.1 nF	
	4.000 µF	1 nF	(± 5 % ± 5 digit)
	40.00 µF	10 nF	
	400.0 µF	100 nF	
Diode	0 ~ 2 V		
Continuity	Continuous beep when resistance < 50 Ω		

I/O

USB Host	1 port, isolated type A plug, Full/Low speed, memory sticks only
USB device	1 port, Micro USB-B, remote control only
Probe compensation output	1 kHz, 0 ~ 5 V Square wave output

Display (Screen)

Display Type	5.6-inch TFT LCD
Display Resolution	640 × 480 pixels
Display Color	24-bit
Contrast(Typical)	500:1
Backlight	200 nits

Display (Waveform)

Range	8 x 12 divisions
Display Mode	Dot, Vector
Persist Time	Off, 1 Sec, 5 Sec, 10 Sec, 30 Sec, Infinite
Color Display	Normal, Color
Screen Saver	1 min, 5 min, 10 min, 30 min, 1 hour, Off
Language	Simplified Chinese, Traditional Chinese, English, French, Japanese, Korean, German, Spain, Russian, Italian, Portuguese

Environmental

Temperature	Operating: 0 °C − +40 °C Non-operating: -20 °C − + 60 °C
Humidity	Operating: 85 % RH, 40 °C, 24 hours Non-operating: 85 % RH, 65 °C, 24 hours
Height	Operating: ≤ 2000 m Non-operating: ≤ 5000 m

[1] The spec for DMM functions are calibrated and verified in Battery-Power mode, Temperature range [23 °C ± 5 °C], warm-up for 0.5 hour.
[2] For rank A (ampere) range, the measurement time should be less than 10s, the interval time should be more than 15 minutes.
[3] This spec is for T3DSO1000-ISO only, The maximum input voltage is 600V (DC/AC) for the T3DSO1000 series.
[4] ± of reading % ± range error. For AC signals, the input signal should be greater than 10 % of range.
[5] 60 mA, 600 mA specification along with adapter SCD600MA; 6 A, 10 A specification along with adapter SCD10A.

SPECIFICATIONS

Standards

Electromagnetic compatibility	Meets EMC directive (2014/30/EU), meets or exceeds IEC 61326-1:2012/EN61326-1:2013 (Basic)		
	Conducted disturbance	CISPR 11/EN 55011	CLASS A group 1, 150 kHz − 30 MHz
	Radiated disturbance	CISPR 11/EN 55011	CLASS A group 1, 30 MHz − 1 GHz
	Electrostatic discharge (ESD)	IEC 61000-4-2/EN 61000-4-2	4.0 kV (Contact), 8.0 kV (Air)
	Radio-frequency electro-magnetic field Immunity	IEC 61000-4-3/EN 61000-4-3	10 V/m (80 MHz to 1 GHz); 3 V/m (1.4 GHz to 2 GHz); 1 V/m (2.0 GHz to 2.7 GHz)
	Electrical fast transients (EFT)	IEC 61000-4-4/EN 61000-4-4	2 kV (Input AC Power Ports)
	Surges	IEC 61000-4-5/EN 61000-4-5	1 kV (Line to line)
	Radio-frequency continuous conducted Immunity	IEC 61000-4-6/EN 61000-4-6	3 V, 0.15 − 80 MHz
	Voltage dips and interruptions	IEC 61000-4-11/EN 61000-4-11	Voltage Dips: 0 % UT during 1 cycle 40 % UT during 10/12 cycles 70 % UT during 25/30 cycles Voltage interruptions: 0 % UT during 250/300 cycles
Safety	UL 61010-1:2012/R:2018-11; CAN/CSA-C22.2 No. 61010-1:2012/A1:2018-11. UL 61010-2-030:2018; CAN/CSA-C22.2 No. 61010-2-030:2018. UL 61010-2-033:2020.		

Power Supply/Battery

Model	T3DSOH1000	T3DSOH1000-ISO
Power Adapter		
Input	100 ~ 240 Vrms 50/60 Hz, 1.2 A	100 ~ 240 Vrms 50/60 Hz, 1.1 A
Output	9 V, 4 A	12 V, 4 A
Battery		
Operating time	5.5 hours	4 hours
Charging time	4 hours while the instrument is switched off	4 hours while the instrument is switched off
Capacity	6900 mAh	
Charging Protection	≥ 55 °C at Battery	
Power Consumption		
Battery Mode	9 W	11 W

Mechanical

IP Rating	IP51
Dimensions	Length: 276 mm Width: 168 mm Height (Depth): 68 mm
Weight with Battery	Without package 1.75 Kg, With package 3.5 Kg

ORDERING INFORMATION

Product Name	T3DSOH1202	200 MHz		
	T3DSOH1102	100 MHz		
	T3DSOH1202-ISO	200 MHz	Isolated Input	
	T3DSOH1102-ISO	100 MHz	Isolated Input	
Standard Accessories	USB Cable		1	
	Quick Start		1	
	Multimeter Test Lead		2	
	Certification		1	
	Power Adapter		1	
	Battery		1	
	SCD600MA Current Measurement Adapter		1	
	SCD10A Current Measurement Adapter		1	
	Carrying Bag		1	
Standard Probes	T3DSOH1102	2 x PP510	(100 MHz, 1X/10X, 1 MΩ/10 MΩ, 1X CATII 150V, 10X CATII 300 V)	
	T3DSOH1202	2 x PP215	(200 MHz, 1X/10X, 1 MΩ/10 MΩ, 1X CATII 150V, 10X CATII 300 V)	
	T3DSOH1102-ISO	2 x PB925	(Staubli 68.9871-12028) (250 MHz, 10X Fixed, 10 MΩ, CATIII 600 V, CATII 1000V)	
	T3DSOH1202-ISO	2 x PB925	(Staubli 68.9871-12028) (250 MHz, 10X Fixed, 10 MΩ, CATIII 600 V, CATII 1000V)	
Replacement Probes	T3DSOH1102	PP020-1	(500 MHz, 10X Fixed, 10 MΩ, CATII 400 V)	
	T3DSOH1202	PP020-1	(500 MHz, 10X Fixed, 10 MΩ, CATII 400 V)	
	T3DSOH1102-ISO	PB925	(Staubli 68.9871-12028) (250 MHz, 10X Fixed, 10 MΩ, CATIII 600 V, CATII 1000 V)	
	T3DSOH1202-ISO	PB925	(Staubli 68.9871-12028) (250 MHz, 10X Fixed, 10 MΩ, CATIII 600 V, CATII 1000 V)	

Warranty: 3 Years return to Teledyne LeCroy.

TELEDYNE TEST TOOLS
Everywhere**you**look™

Company Profile

Teledyne LeCroy is a leading provider of oscilloscopes, protocol analyzers and related test and measurement solutions that enable companies across a wide range of industries to design and test electronic devices of all types. Since our founding in 1964, we have focused on creating products that improve productivity by helping engineers resolve design issues faster and more effectively. Oscilloscopes are tools used by designers and engineers to measure and analyze complex electronic signals in order to develop high-performance systems and to validate electronic designs in order to improve time to market.

The Teledyne Test Tools brand extends the Teledyne LeCroy product portfolio with a comprehensive range of test equipment solutions. This new range of products delivers a broad range of quality test solutions that enable engineers to rapidly validate product and design and reduce time-to-market. Designers, engineers and educators rely on Teledyne Test Tools solutions to meet their most challenging needs for testing, education and electronics validation.

Location and Facilities

Headquartered in Chestnut Ridge, New York, Teledyne Test Tools and Teledyne LeCroy has sales, service and development subsidiaries in the US and throughout Europe and Asia. Teledyne Test Tools and Teledyne LeCroy products are employed across a wide variety of industries, including semiconductor, computer, consumer electronics, education, military/aerospace, automotive/industrial, and telecommunications.

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T3 stands for Teledyne Test Tools.   25july23