

## Debug in High Definition

350 MHz – 1 GHz



### Key Specifications

<b>Bandwidth</b>	350 MHz, 500 MHz, 1 GHz
<b>Resolution</b>	12-bit ADC resolution, up to 15-bit with enhanced resolution
<b>Channels</b>	4
<b>Memory</b>	Up to 250 Mpts/Ch
<b>Sample Rate</b>	Up to 10 GS/s with Enhanced Sample Rate
<b>Digital Channels</b>	16 (with -MS Models)
<b>Digital Sample Rate</b>	1.25 GS/s
<b>User Interface</b>	MAUI with OneTouch
<b>Display</b>	12.1" Wide TFT-LCD Multi-Touch Screen
<b>Connectivity</b>	USB Host, USB Device, LAN, GPIB

### Tools for Improved Debugging

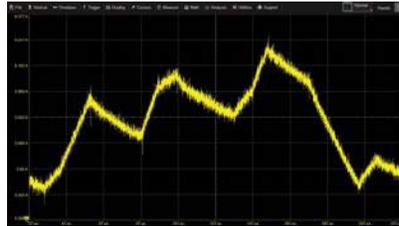
- **HD4096 Technology** - HD4096 high definition technology enables capture and display of signals up to 1 GHz with high sample rate and 16 times more resolution.
- **Mixed Signal** – Debug complex embedded designs with integrated 16 channel mixed signal capability
- **MAUI with OneTouch** – Dramatically reduce setup time with drag, drop, and flick to instinctively interact with the oscilloscope.
- **Spectrum Analyzer** – View signal details in the frequency domain with a spectrum analyzer style user interface
- **WaveScan** – Quickly search waveforms for runts, glitches or other anomalies
- **Long Memory** – Up to 250 Mpts/ch captures and support for 5 MS/s Roll mode.
- **LabNotebook** – Save all results and data with a single button press and create custom reports with LabNotebook
- **Software Options** - 23 different serial trigger/decode, measure/graph, and eye diagram options, plus many others.

For more information, please contact:

8 bit

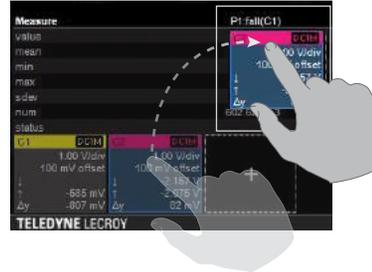


12 bit



Comparison of 20-to-1 vertical zoom of a measured current signal from a pulse-width modulated inverter/drive output.

Waveforms displayed by the HDO8000A are cleaner and crisper. More signal details can be seen and measured; these measurements are made with unmatched precision resulting in better test results and shorter debug time.



MAUI with OneTouch optimizes convenience and efficiency. All common operations can be performed with a single touch.



**HD**  
4096

## Ordering Information

Model	Bandwidth	Channels	Standard Memory / Optional (per Ch)	Sample Rate
HDO6034A / HDO6034A-MS	350 MHz	4 / 4+16	50 Mpts / 250 Mpts	10 GS/s
HDO6054A / HDO6054A-MS	500 MHz	4 / 4+16	50 Mpts / 250 Mpts	10 GS/s
HDO6104A / HDO6104A-MS	1 GHz	4 / 4+16	50 Mpts / 250 Mpts	10 GS/s

### Available Probes

#### High Voltage Fiber Optically-isolated Probes

**HVF0103** High Voltage Fiber Optic Probe, 60 MHz Bandwidth.

#### Differential

**HVD3102** 1kV, 25 MHz High Voltage Differential Probe  
**HVD3106** 1kV, 120 MHz High Voltage Differential Probe  
**HVD3206** 2kV, 120 MHz High Voltage Differential Probe  
**HVD3605** 6kV, 100 MHz High Voltage Differential Probe  
**AP033** 500 MHz Active Differential Probe  
**ZD200** 200 MHz Active Differential Probe  
**ZD500** 500 MHz Active Differential Probe  
**ZD1000** 1 GHz Active Differential Probe  
**ZD1500** 1.5 GHz Active Differential Probe

#### Differential Amplifiers

**DA1855A** 1 Ch, 100 MHz Differential Amplifier

#### Single-Ended

**ZS1500** 1.5 GHz, 0.9 pF, 1 MΩ High Impedance Active Probe  
**ZS1000** 1 GHz, 0.9 pF, 1 MΩ High Impedance Active Probe

#### High-Voltage

**HVP120** 400 MHz, 1kV V<sub>rms</sub> High-Voltage Passive Probe  
**PPE4KV** 100:1 400 MHz 50 MΩ 4kV High-Voltage Probe  
**PPE5KV** 1000:1 400 MHz 50 MΩ 5 kV High-Voltage Probe  
**PPE6KV** 1000:1 400 MHz 50 MΩ 6 kV High-Voltage Probe

#### Current

**CP030** 30A; 50 MHz Current Probe – AC/DC; 30 A<sub>rms</sub>; 50 A<sub>peak</sub> Pulse  
**CP030A** 30A; 50 MHz High Sensitivity Current Probe - AC/DC, 30 A<sub>rms</sub>, 50 A<sub>peak</sub> Pulse,  
**CP031** 30A; 100 MHz Current Probe – AC/DC; 30 A<sub>rms</sub>; 50 A<sub>peak</sub> Pulse  
**CP031A** 30A, 100 MHz High Sensitivity Current Probe - AC/DC, 30 A<sub>rms</sub>, 50 A<sub>peak</sub> Pulse,  
**CP150** 150A; 10 MHz Current Probe – AC/DC; 150 A<sub>rms</sub>; 50 A<sub>peak</sub> Pulse  
**CP500** 500A; 2 MHz Current Probe – AC/DC; 500 A<sub>rms</sub>; 700 A<sub>peak</sub> Pulse

#### Active Voltage Rail Probe

**RP4030** Power/Voltage Rail Probe. 4 GHz, ±30V offset, ±800mV

#### Probe Adapters

**TPA10** TekProbe to ProBus Probe Adapter  
**CA10** Programmable ProBus Current Adapter

## Excellent Performance

- 350 MHz, 500 MHz, 1 GHz
- 12-bit ADC resolution, 15-bit with ERES
- Up to 10 GS/s sample rate
- Up to 250 Mpts / Ch
- 16 Channel Mixed Signal Capability

## Rich Feature Set

- Power Electronics
- Digital power management, power integrity
- Deeply embedded systems with sensors
- Power sequence testing
- Mechatronics

## Exceptional Serial Data Tools

- I<sup>2</sup>C, SPI, UART
- CAN, LIN, FlexRay™, SENT
- Ethernet 10/100BaseT, USB 1.0/1.1/2.0, USB 2.0 HSIC
- Audio (I<sup>2</sup>S, LJ, RJ, TDM)
- MIL-STD-1553, ARINC 429
- MIPI D-PHY, DigRF 3G, DigRF v4
- Manchester, NRZ, MDIO, SpaceWire, SPMI