

Analyze and Debug in High Definition

350 MHz – 1 GHz



Key Specifications

Bandwidth	350 MHz, 500 MHz, 1 GHz
Resolution	12-bit ADC resolution, up to 15-bit with enhanced resolution
Channels	4
Memory	Up to 250 Mpts/Ch
Sample Rate	2.5 GS/s
Digital Channels	16
Digital Sample Rate	1.25 GS/s
Minimum Pulse Width	2 ns
Display	12.1" Wide TFT-LCD Touch Screen
Connectivity	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
- **Touch Screen** – easily configure channels, timebase, trigger and all functions with the intuitive, efficient touch screen interface
- **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
- **LabNotebook** – save all results and data with a single button press and create custom reports with LabNotebook
- **Software Options** - available software option packages for advanced analysis
 - Power Analysis
 - Serial Bus Trigger and Decode
 - PROTObus MAG Serial Debug Toolkit

For more information, please contact:





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



Quickly locate analog or digital waveforms for runts, glitches or other anomalies with WaveScan.



Comprehensive set of waveform math and measurement tools extends the debugging and analysis capability



Ordering Information

Model	Bandwidth	Channel	Standard Memory / Optional (per Ch)	Sample Rate
HDO6034 / HDO6034-MS	350 MHz	4 / 4+16	50 Mpts / 250 Mpts	2.5 GS/s
HDO6054 / HDO6054-MS	500 MHz	4 / 4+16	50 Mpts / 250 Mpts	2.5 GS/s
HDO6104 / HDO6104-MS	1 GHz	4 / 4+16	50 Mpts / 250 Mpts	2.5 GS/s

Available Probes

Single-Ended

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

Differential

ADP300 1,400 V, 20 MHz High-Voltage Differential Probe
ADP305 1,400 V, 100 MHz High-Voltage Differential Probe
AP031 700 V, 15 MHz High-Voltage 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
DXC100A 100:1 or 10:1 Selectable, 250 MHz Passive Differential Probe Pair

High-Voltage

PPE1.2KV 10:1/100:1 200/300 MHz 50 MΩ High-Voltage Probe 600V/1.2kV Max. Volt. DC
PPE2KV 100:1 400 MHz 50 MΩ 2 kV High-Voltage 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

AP015 30 A; 50 MHz Current Probe – AC/DC; 30 A_{rms}; 50 A_{peak} Pulse
CP030 30 A; 50 MHz Current Probe – AC/DC; 30 A_{rms}; 50 A_{peak} Pulse
CP031 30 A; 100 MHz Current Probe – AC/DC; 30 A_{rms}; 50 A_{peak} Pulse
CP150 150 A; 10 MHz Current Probe – AC/DC; 150 A_{rms}; 50 A_{peak} Pulse
CP500 500 A; 2 MHz Current Probe – AC/DC; 500 A_{rms}; 700 A_{peak} Pulse

Excellent Performance

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

Rich Feature Set

- WaveScan™ search and find
- LabNotebook™ report generator
- Spectrum Analyzer Mode

Wide Range of Serial Data Tools

- I²C, SPI, UART
- CAN, LIN, FlexRay™, SENT
- Ethernet 10/100BaseT, USB 1.0/1.1/2.0, USB 2.0 HSIC
- Audio (I²S, LJ, RJ, TDM)
- MIL-STD-1553, ARINC 429
- MIPI D-PHY, DigRF 3G, DigRF v4
- PROTObus MAG Serial Debug Toolkit
- Manchester, NRZ