TELEDYNE LECROY
Everywhereyoulook™

3-phase or >1 kW Power Conversion

WaveRunner 8000HD 12-bit oscilloscopes deliver 8 analog channels (16 with OscilloSYNC), 3-phase power analysis software, and high performance probes for inverter subsection, power system and control testing.

Static, Dynamic, Complete

Analyze short or long acquisitions. The mean value Numerics table summarizes static performance, while per-cycle Waveforms help you understand dynamic behaviors. Use Zoom+Gate to isolate and correlate power system behaviors to control system activity during time periods as short as a single device switching cycle.

Comprehensive probing

HVD series high voltage differential probes have 65 dB CMRR at 1 MHz with 1% gain accuracy, the widest voltage ranges, and up to 6 kV common-mode rating. Connect current probes or use your own transducers with the programmable CA10 current sensor adapter to create a customized “probe”. HVFO fiber-optic probes are ideal for gate drive probing.

Up to 16 analog channels

8 analog inputs at up to 2 GHz let you monitor an H-bridge’s four pairs of device output and gate drive input signals. Cascaded H-bridges may be easily monitored using 12 channels, with three additional channels for output voltage. WaveRunner 8000HD has enough channels for full 3-phase power section input/output and control section analysis.

WAVERUNNER 8000HD VS TEKTRONIX 5 SERIES

HD 4096

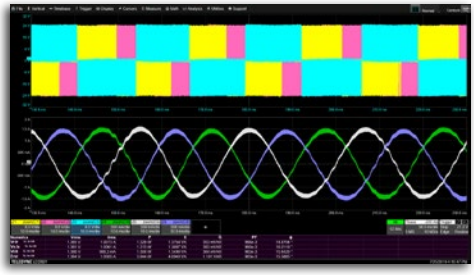
		Teledyne LeCroy WaveRunner 8000HD		Tektronix MSO58 (5 Series)
Analog Channels	✓	8 (16 with OscilloSYNC™)	X	8 (without digital)
Digital Channels	✓	16 (with MSO option)	X	8 to 64 (optional) Each 8 digital channels consumes 1 analog channel
Resolution	✓	12 bits	X	12-bit ADC but 8-bit real-world noise performance
Bandwidth	✓	350 MHz - 2 GHz	X	350 MHz - 2 GHz Resolution is 8 bits at 2 GHz
Sample Rate	✓	10 GS/s	X	6.25 GS/s
Memory	✓	50 Mpts/Ch standard 1.25 Gpts/Ch maximum	X	62.5 Mpts/Ch standard 125 Mpts/Ch maximum
Display Size / Resolution	✓	15.6", 1920 x 1080 pixels Supports UHD (4096 x 2304) external monitor	✓	15.6", 1920 x 1080 pixels Supports HD (1920 x 1080) external monitor
Static Power Analysis (3-phase)	✓	Yes	X	No
Dynamic Power Analysis (3-phase)	✓	Yes	X	No
Vector Display	✓	Yes	X	No
Harmonics Calculations	✓	Yes	X	No
Power Measurement Accuracy	✓	~1% (typical, using probes)	X	Not applicable

Static, Dynamic, Complete

Teledyne LeCroy's HD4096 technology provides 12-bit resolution all the time for very high power measurement accuracy. The 3-phase power conversion software application package provides unique analytics and debug capabilities

Static power analysis

The mean value Numerics table displays voltage, current, power, THD, etc. values for short (or long) time periods during constant (static) operating conditions - just like what a dedicated power analyzer instrument provides.



Dynamic power analysis

Capture thousands of power cycles over long time periods. Per-cycle Waveform displays help you understand dynamic behaviors. Use Zoom+Gate to isolate and correlate power behaviors to control system operation during dynamic operating conditions.

Complete test coverage

Acquire and display analog, digital and serial data signals from both power and embedded control systems. Correlate power system behaviors to control system activity during time periods as short as a single device switching cycle.

Testing motors or motor drives?

The Motor Drive Analyzer is built on our WaveRunner 8000HD oscilloscope platform and adds mechanical power calculations with nine speed, four angle and five torque calculations or sensors supported. See teledynelecroy.com/static-dynamic-complete.

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teledynelecroy.com

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