



MDA 8000HD Motor Drive Analyzer

350 MHz – 2 GHz
8 Channels, 12-bit Resolution

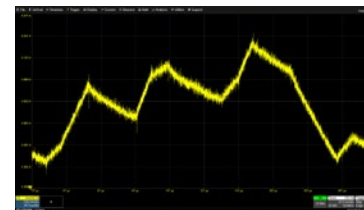
Static, Dynamic, Complete



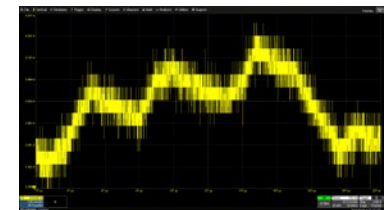
Test Coverage	Teledyne LeCroy MDA 8000HD Motor Drive Analyzer	Tektronix MSO 58 (5 Series) Oscilloscope	Yokogawa DLM4000 Oscilloscope
Power Semiconductor	Complete	Complete	Complete
Inverter Subsection	Complete	Complete	Complete
Complete Drive System	Complete	Limited	Limited
Embedded Control System	Complete	Complete	Complete

	Teledyne LeCroy MDA 8000HD Motor Drive Analyzer	Tektronix MSO 58 (5 Series) Oscilloscope	Yokogawa DLM4000 Oscilloscope
Analog Inputs	8 + 8 (with OscilloSYNC)	8 (less with MSO)	8 (less with MSO)
Digital Inputs	16 (with MSO option)	8 to 64 (optional)	8 (optional)
Resolution	12 bits	12-bit ADC 8-bit performance	8 bits
Bandwidth	350 MHz - 2 GHz	350 MHz - 2 GHz	350 - 500 MHz
Sample Rate	10 GS/s	6.25 GS/s	1.25 GS/s
Memory	50 Mpts/Ch standard 1.25 Gpts/Ch maximum	62.5 Mpts/Ch standard 125 Mpts/Ch maximum	6.25 Mpts/Ch standard 125 Mpts/Ch maximum
Display Size	15.6"	15.6"	12.1"
Static Power Analysis (3-phase)	Yes	No	No
Dynamic Power Analysis (3-phase)	Yes	No	No
Mechanical Interface	9 Speed, 5 Torque, 4 Angle (Standard)	No	No
Vector Display	Yes	No	No
Harmonics Calcs	Yes	No	No
Power Accuracy	~1%	-	-
Voltage Probes	Yes	Yes	Yes
Current Probes	Yes	Yes	Yes
Serial Trigger & Decode	Yes	Yes	Yes

12-bit Resolution vs. 8-bit Resolution

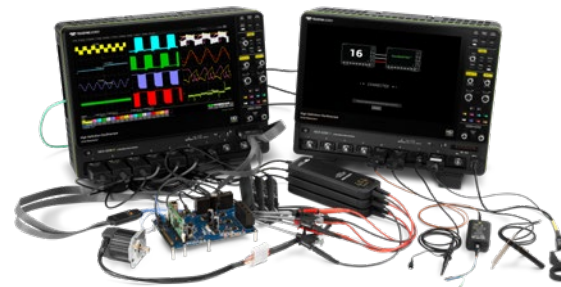


12-bit Resolution Oscilloscope



8-bit Resolution Oscilloscope

Teledyne LeCroy OscilloSYNC™ for 16 Channels



View and control 16 analog channels on a single display.

Setup is incredibly easy.

It's like having a single 16-channel acquisition system.

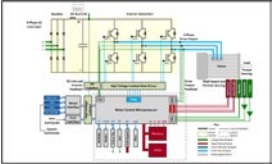

Use two 8-channel MDAs independently, or connect them for 16 channels.

What Motor Drive Engineers Need - Static, Dynamic, Complete

Motor Drive Analyzer

Motor Interface
(Torque, Speed, Angle)

3-phase Power Analysis
(Inputs, Resolution)

Teledyne LeCroy
Motor Drive Analyzer
8 channels, 12 bits

STATIC

DYNAMIC

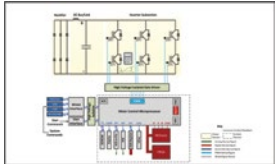
COMPLETE

Complete Acquisition Capabilities
(BW, SR, Resolution, Memory;
Analog, Digital, Sensor, Serial Data)

8-channel, 8-bit Resolution Oscilloscope

Motor Interface
(Torque, Speed, Angle)

3-phase Power Analysis
(Inputs, Resolution)

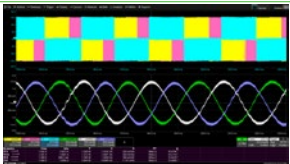

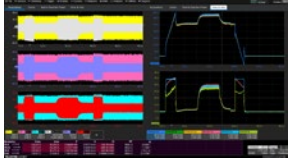

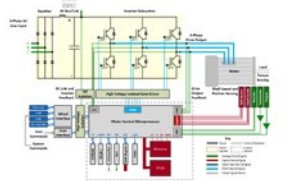


COMPLETE

Complete Acquisition Capabilities
(BW, SR, Resolution, Memory;
Analog, Digital, Sensor, Serial Data)

Teledyne LeCroy Motor Drive Analyzers combine capabilities of power analyzer instruments and oscilloscopes to provide complete drive system testing, including:

- IGBT/MOSFET Device Test
- Inverter Subsection Test
- Embedded Control System Test
- Control Loop Analysis
- Power Systems Analysis
- Drive System Validation

Capability	Teledyne LeCroy MDA 8000HD Motor Drive Analyzer	8-channel, 8-bit Resolution Oscilloscope
Static Power Analysis	Yes Short records. Constant load/speed. Numerics value table. Correlation to controls. 	No 
Dynamic Power Analysis	Yes Long time durations. Variable loads/speeds. Statistics table. Per-cycle Waveforms. Correlation to controls. 	No 
Complete Test Capability	Yes View 3-phase waveforms. Mixed Signal (MSO). Serial trigger & decode. Probes & accessories. Combine two instruments for 16 channels. 	Limited View 3-phase waveforms. Not enough resolution. No motor interface. No simple capability to combine two instruments. 