# MSO/DPO2000B Series vs. R&S HMO1002 Series Competitive Fact Sheet

## More Channels, Advanced Triggering and Navigation/Search through Record Length

### Tektronix MSO/DPO2000B Series

- ✓ Up to 4 analog channels and 16 digital channels
- ✓ Wave Inspector<sup>®</sup> dedicated Pan/Zoom controls make easy work of scrolling through long records.
- Play/Pause button scrolls the waveform across the screen automatically.
- ✓ Search/Mark controls enable you to search for events of interest, mark them, then navigate through the record mark-by-mark.



## R&S HMO1002 Series

- 2 analog channels and 8 digital channels
- CH2 will be deactivated when digital channels on
- Simplified Zoom control
- Auto scrolling of horizontal position to scroll through data.
- Search ability only on analog peak events



# Key Specifications Comparison

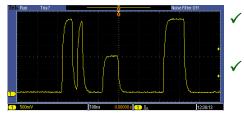
		Tektronix MSO/DPO2000B Series		11002		Tektronix MSO/DPO2000B Series		R&S HOM1002	
Channels Analog	~	2, 4	×	2, CH2 will be deactivated when digital channel s on	Bundle Modules	<ul> <li>× No function/pattern generator</li> <li>× No Voltmeter</li> </ul>		<ul> <li>✓ Function/pattern generator</li> <li>✓ 3 digits Voltmeter</li> </ul>	
Channels Digital (MSO only)	✓	16	×	8	Probing Support	~	Probe menu on oscilloscope interacts directly with probe	×	No oscilloscope and probe communications
Bandwidth	✓	70, 100, <mark>200 MHz</mark>	×	50, 70, 100 MHz	Navigation and	~	Dedicated Wave Inspector zoom controls, Search analog, digital and	×	Simplified zoom controls, no Search function
Max. Sample Rate (All channels on)	~	1 GS/s	x	500 MS/s	Search	✓	serial bus.	×	
Standard Record Length (All analog channels on)	~	1 M points	x	500 k points	Max Input Voltage Auto Measurements	×	300Vrms with peaks<=450V         29 auto measurements	× √	200Vpk 31 auto measurements
Set of Triggers	~	Edge/ Pulse width/ Runt/ Logic/ Setup&hold/ Rise/Fall Time/ Video/ Bus	x	Edge,/Pulse/ Hold/Video/Bus/Logic	Connectivity	~	USB-D, USB-H, LAN optional, Video-Out optional PC-SW, API, optional GPIB	x	USB-D, USB-H, Ethernet (RJ45)
Navigation and Search	~	Dedicated Wave Inspector zoom controls, Search analog,	x	Multiplexed zoom controls, Search only on analog peak	Warranty	✓	5 years	×	3 years
Serial Bus Decode Protocol		digital and serial bus. I2C, SPI, CAN, LIN, UART,	x	I2C, SPI, CAN, LIN, UART,	Display Size (resolution)	~	7.0-inch wide format (480 x 234)	✓	6.5-inch wide format (640 x 480)
Serial Bus Decode	• •	RS-232/422/485 2 bus at same time	~ √	RS-232 2 bus at same time	List Price Range (GPB)		<ul> <li>✓ 70-100 MHz DPO £866-1,110</li> <li>✓ 70-100 MHz MSO £1,500-1,720</li> <li>✓ 50-100 MHz W/o MSO £982-1,160</li> <li>✓ 50-100 MHz W/ MSO £982-1,160</li> </ul>		



# MSO/DPO2000B Series vs. R&S HMO1002 Series Competitive Fact Sheet

# Embedded System Debugging – Triggering

#### Tektronix MSO/DPO2000B Series



Quickly trigger directly on Runt.

- 8 major trigger types available, and over 125 trigger combinations possible.
- Runt, Setup/Hold, Rise/Fall-time trigger types reduce digital debugging time.

#### R&S HMO1002 Series

- ✗ Only 6 trigger types available.
- x No Runt, Setup, Rise/Fall trigger types to help with digital debugging.

## MSO Series Mixed Signal Debug

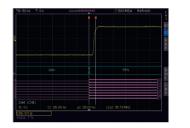
#### Tektronix MSO2000B Series

#### **R&S** HMO1002 Series

- ✓ View up to 4 analog, 16 digital, and 2 bus waveforms, time-correlated.
- ✓ Serial bus decode on both analog and digital channels
- View 8 digital bus waveforms, timecorrelated.

Tek PreVu	Noise Filter Off
1 I2C clk	
😰 l2C data	
BID 12C	[- <mark>(_[R]: 50</mark> )—(Data: 1E)—(Data: 20)—(Data: 22)—(Data: 24)—-]
0 12C clk	
1 I2C data	
5.00 V	(2) 5.00 V [40.0,us 110.222,us] (1) 7 2.00 V 59.81690Hz
Serial	bus decode on both analog and

digital channels



Serial bus decode not available on digital channels

# Other Advanced Featured Options from Tektronix

### Tektronix 2 channel TBS1000B Series

- ✓ 2 channel model on 50, 70, 100,150, 200 MHz models
  - BW<100MHz with 1 GS/s and BW>=100MHz with 2GS/s

### Tektronix TDS2000C Series

- 4 channel model on 70MHz, 100MHz, 200MHz models
- ✓ Limited life time warranty (at least 10 years)

### Tektronix 4 channel TBS1000 Series

4 channel model on 60MHz, 100MHz, 150MHz models



