

Scope of the art R&S® Scope Rider Handheld digital oscilloscope

Lab performance in a rugged
and portable design

1 60 MHz to 500 MHz
1 Isolated, CAT IV

2 MIN
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Invest 2 minutes
and you'll never
look back.


ROHDE & SCHWARZ

R&S® Scope Rider

Experience our handheld scope for 2 minutes and you'll never look back

In the lab

Lab performance in a rugged and portable design – the perfect multipurpose tool for the lab or in the field.

Superior performance

- | 60 MHz to 500 MHz with 5 Gsample/s sampling rate
- | 50 000 waveforms per second
- | 10-bit ADC
- | 2 mV/div to 100 V/div
- | Up to 300 V offset range
- | 33 automatic measurement functions

5 instruments in one handheld package

- | Lab performance oscilloscope
- | Logic analyzer
- | Protocol analyzer
- | Data logger
- | Digital multimeter*

7", 800 x 480 capacitive touch display

> 4 h battery life

Switch between all instrument modes

One-touch documentation: easily save screenshots and measurements



* Additional multimeter channel in two-channel model.

In the field



CAT IV 600V / CAT III 1000V:
galvanic-insulated floating channels

Rugged, dust and
water resistant
housing

Multifunction
wheel

Unmatched
connectivity:
USB, Ethernet and
wireless LAN

Large buttons,
can be used
with gloves

**Capacitive touch and
keypad operation**

- ▮ Full operation via touch panel or keypad
- ▮ See more with a 7" color display
- ▮ Easy parameter adjustment with multifunction wheel
- ▮ Large buttons for use with gloves

Outstanding protection

- ▮ Maximum safety in all environments:
CAT IV 600 V / CAT III 1000 V
- ▮ IP51 housing that meets military
environmental requirements
- ▮ Non-slip and impact resistant
rubberized surface

**Excellent connectivity and
much more**

- ▮ Wireless LAN and Ethernet for web-based
remote control and quick data access
- ▮ Finish faster with one-touch documentation
- ▮ MicroSD card and USB device/host support
- ▮ More than 4 hours of battery power

Simply better

Model	R&S®Scope Rider	Typical isolated lab oscilloscope	Typical isolated handheld oscilloscope
Bandwidth	60 MHz to 500 MHz at 5 Gsample/s	100 MHz to 200 MHz at 2 Gsample/s	60 MHz to 500 MHz at 5 Gsample/s
A/D converter	10 bit	8 bit	8 bit
User interface	7", 800 x 480 color capacitive touch, keypad, multifunction wheel	6", 320 x 240 color, keypad	6", 320 x 240 color, keypad
Acquisition speed	50 000 waveforms/s	≈200 waveforms/s	≈10 waveforms/s
Max. record length	500 ksample	2.5 ksample	10 ksample
Lowpass filtering	flexible: 1 kHz to 200 MHz	analog only: 20 MHz	analog only: 10 kHz and 20 MHz
Trigger system	digital, 14 trigger types	analog, 3 trigger types	analog, 3 trigger types
Protocol decoding	trigger and decode	none	none
Mixed signal option	8 digital channels	none	none
Remote control	web browser based, wireless LAN or Ethernet	PC software required, Ethernet	PC software required, Ethernet

In the lab

The R&S®Scope Rider delivers lab performance in a portable, battery-powered package with the added benefit of isolated channels.

It is the first handheld oscilloscope with an integrated MSO (eight digital channels) and protocol analysis capability on both the analog and digital channels.

With up to 50 000 waveforms per second, it quickly uncovers rare signal faults and provides excellent responsiveness. A digital trigger system with a large set of triggering functions enables it to accurately trigger on the signal that needs to be analyzed.

Requiring only minimum bench space, the R&S®Scope Rider is the perfect tool for even complex R&D debugging tasks and also offers the flexibility required for use in the field.

In the field

With the R&S®Scope Rider, there is no longer a need to compromise on performance when troubleshooting in the field.

It provides all the features and capabilities of today's lab oscilloscopes in a rugged and portable format, with enough battery power for a day's work.

Isolated inputs with 600 V CAT IV rating allow safe measuring in all environments. If extra safety is needed, the R&S®Scope Rider can be remotely controlled with the web browser via wireless LAN, separating the measurement location from the place where the user controls the instrument.

With five instrument modes, including an integrated multimeter*, the R&S®Scope Rider is the perfect troubleshooting instrument for work in the field.

*Only two-channel models



Choose your instrument

Configuration recommendation			
Application area	Field		Lab
	Electric and electromechanical installation and maintenance	Electronic field service and maintenance	Research and product development
R&S®ScopeRider – the perfect tool for diagnostics and troubleshooting of:	<ul style="list-style-type: none"> ▮ Electric installations ▮ Motors, fans and pumps ▮ Electric drives ▮ Sensors and transducers ▮ Industrial machinery 	<ul style="list-style-type: none"> ▮ Robotic systems ▮ Solar inverters ▮ Backup power supplies ▮ Avionic and military systems ▮ Medical equipment ▮ Rail vehicle systems 	<ul style="list-style-type: none"> ▮ Embedded systems ▮ Industrial controllers ▮ Power electronics ▮ General electronics ▮ Environmental testing
Industries			
Automotive		•	•
Aerospace and defense	•	•	•
Energy	•	•	•
Industry automation	•	•	•
Medical		•	•
Power electronics		•	•
Oscilloscope Input			
2 channels + digital multimeter	R&S®RTH1002	R&S®RTH1002	
4 channels		R&S®RTH1004	R&S®RTH1004
Bandwidth			
60, 100, 200, 350, 500 MHz models	60 MHz to 100 MHz	100 MHz to 500 MHz	200 MHz to 500 MHz
Logic (MSO) option			
8 digital channels		•	•
Analysis options			
I ² C/SPI trigger and decode		•	•
RS232/UART trigger and decode		•	•
History and segmented memory	•	•	•
Advanced trigger			•
Wireless LAN interface	•	•	•
Web interface remote control	•	•	•
Accessories			
Current probes	•	•	•
Car adapter	•	•	
Carrying case	•	•	
Battery charger	•	•	

R&S®ScopeRider model overview							
Bandwidth					Analog channels	Multi-meter	Logic channels (MSO)
60 MHz	100 MHz	200 MHz	350 MHz	500 MHz			
R&S®RTH1002	R&S®RTH1012	R&S®RTH1022	R&S®RTH1032	R&S®RTH1052	2	•	
R&S®RTH1004	R&S®RTH1014	R&S®RTH1024	R&S®RTH1034	R&S®RTH1054	4		
R&S®RTH1002MSO	R&S®RTH1012MSO	R&S®RTH1022MSO	R&S®RTH1032MSO	R&S®RTH1052MSO	2	•	8
R&S®RTH1004MSO	R&S®RTH1014MSO	R&S®RTH1024MSO	R&S®RTH1034MSO	R&S®RTH1054MSO	4		8

Service that adds value

- | Worldwide
- | Local and personalized
- | Customized and flexible
- | Uncompromising quality
- | Long-term dependability

About Rohde & Schwarz

The Rohde & Schwarz electronics group offers innovative solutions in the following business fields: test and measurement, broadcast and media, secure communications, cybersecurity, radiomonitoring and radiolocation. Founded more than 80 years ago, this independent company has an extensive sales and service network and is present in more than 70 countries. The electronics group is among the world market leaders in its established business fields. The company is headquartered in Munich, Germany. It also has regional headquarters in Singapore and Columbia, Maryland, USA, to manage its operations in these regions.

Sustainable product design

- | Environmental compatibility and eco-footprint
- | Energy efficiency and low emissions
- | Longevity and optimized total cost of ownership

Certified Quality Management

ISO 9001

Certified Environmental Management

ISO 14001

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