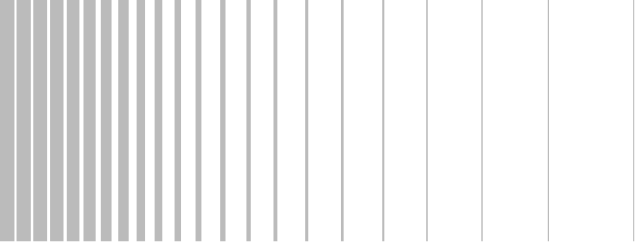


R&S® RT-Zxx

Standard Passive Probes

Specifications



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Definitions

General

Product data applies under the following conditions:

- Three hours storage at ambient temperature followed by 30 minutes warm-up operation
- Specified environmental conditions met
- Recommended calibration interval adhered to

Specifications with limits

Represent warranted product performance by means of a range of values for the specified parameter. These specifications are marked with limiting symbols such as <, ≤, >, ≥, ±, or descriptions such as maximum, limit of, minimum. Compliance is ensured by testing or is derived from the design. Test limits are narrowed by guard bands to take into account measurement uncertainties, drift and aging, if applicable.

Specifications without limits

Represent warranted product performance for the specified parameter. These specifications are not specially marked and represent values with no or negligible deviations from the given value (e.g. dimensions or resolution of a setting parameter). Compliance is ensured by design.

Typical data (typ.)

Characterizes product performance by means of representative information for the given parameter. When marked with <, > or as a range, it represents the performance met by approximately 80 % of the instruments at production time. Otherwise, it represents the mean value.

Measured values (meas.)

Characterize expected product performance by means of measurement results gained from individual samples.

Typical data as well as measured values are not warranted by Rohde & Schwarz.

Probe/oscilloscope chart

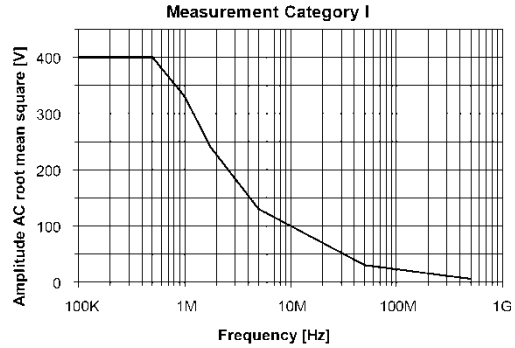
Base unit: R&S®	RTM				RTE/RTO							RT-ZA9	Page
	200 MHz	350 MHz	500 MHz	1 GHz	200 MHz	350 MHz	500 MHz	600 MHz	1 GHz	2 GHz	4 GHz		
Probe: R&S®													
Passive probes													
RT-ZP10					●	●	●	●	●	●	●		5
RTM-ZP10	●	●	●	●									5

- recommended extra
- possible accessory, with limited functionality of probe or base unit

R&S®RT-ZP10, R&S®RTM-ZP10 passive probes

All parameters are valid when the probe is connected to an appropriate Rohde & Schwarz oscilloscope with an input impedance of 1 MΩ. See table on page 4 and Rohde & Schwarz oscilloscope operating manual for more details.

		R&S®RT-ZP10	R&S®RTM-ZP10
Step response			
Rise time	system, 10 % to 90 %	700 ps (meas.)	
Frequency response			
Bandwidth	system, -3 dB, starting at DC	> 500 MHz	
Input impedance			
DC input resistance	system	10 MΩ ± 1 %	
Input capacitance	system	9.5 pF (meas.)	
DC characteristics			
Attenuation	system, automatically corrected on base unit display	10:1	
Attenuation error	probe only, with ideal 1 MΩ load impedance	±2 %	
Attenuation voltage coefficient		±0.0025 %/V (meas.)	
Maximum rated input voltage			
Continuous voltage	derated, see figure on page 6	400 V (RMS), CAT I 300 V (RMS), CAT II	
Transient overvoltage		±1250 V	
Base unit			
Use with		R&S®RTO	R&S®RTM
Input capacitance	must be compensated by probe's LF compensation	5 pF to 20 pF	
Input coupling		1 MΩ AC/DC	



R&S®RT-ZP10, R&S®RTM-ZP10 maximum rated sine-wave root mean square voltage versus frequency.

General data

Temperature		
Temperature loading	operating temperature range	0 °C to +50 °C
	storage temperature range	-40 °C to +70 °C
Climatic loading		80 % relative humidity for temperatures up to +31 °C, decreasing linearly to 40 % at +50 °C
Altitude	operation	up to 2000 m
	transport	up to 15000 m
Safety		in line with Low Voltage Directive 2006/95/EC, IEC/EN 61010-31 (pollution degree 2)
Mechanical data		
Dimensions	diameter of probe tip	approx. 2.5 mm (0.1 in)
	cable length	approx. 1.3 m (51 in)
Weight	probe only	approx. 48 g (0.1 lb)

Ordering information

Designation	Type	Order No.
Standard passive probes		
500 MHz Passive Voltage Probe, 10:1, 10 M Ω , 9.5 pF, 400 V (RMS) Incl. adjustment tool; coding rings (set) 3 × 4 colors; ground lead 15 cm; ground spring 2.5; solid tip CuBe 0.5 mm; sprung hook 2.5; spring tip gold-plated 0.5 mm; operating manual	R&S®RT-ZP10	1409.7550.00
500 MHz Passive Voltage Probe, 10:1, 10 M Ω , 9.5 pF, 400 V (RMS) See R&S®RT-ZH10 for equipment included	R&S®RTM-ZP10	1409.7708.02
Accessories and sets		
Accessory Kit for R&S®RT-ZP10, R&S®RTM-ZP10 passive voltage probes Contains: adjustment tool; BNC adapter 2.5; coding rings (set) 3 × 4 colors; dual adapter 2.5 mm to 0.8 mm sockets; ground blade 2.5; copper pad, self adhesive (2 cm × 2 cm) (0.79 in × 0.79 in) (2); ground lead 15 cm; ground spring 2.5 (5); IC-cap 2.5 0.5 mm pitch green; IC-cap 2.5 0.65 mm pitch blue; IC-cap 2.5 0.8 mm pitch grey; IC-cap 2.5 1.0 mm pitch brown; IC-cap 2.5 01.27 mm pitch black; insulating cap 2.5; solid tip CuBe 0.5 mm (5); sprung hook 2.5; spring tip gold-plated 0.5 mm (5)	R&S®RT-ZA1	1409.7566.02
Mini Clips, contains: mini clip (10)	R&S®RT-ZA4	1416.0428.02
Micro Clips, contains: micro clip (4)	R&S®RT-ZA5	1416.0434.02
Lead Set, contains: lead 6 cm (2.4 in) (5); lead 15 cm (5.9 in) (5)	R&S®RT-ZA6	1416.0440.02

Service that adds value

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

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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R&S®RT-Zxx Standard Passive Probes

Data without tolerance limits is not binding | Subject to change

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