STROMZANGEN

Stromzangen von Rohde & Schwarz ermöglichen genaue, nicht invasive Messungen von Gleich- und Wechselströmen. Es sind verschiedene Modelle für Messungen von Strömen im Bereich von 1 mA bis 2000 A mit einer maximalen Bandbreite von bis zu 120 MHz verfügbar.

Messung von Gleich- und Wechselströmen ohne Unterbrechung des Messstromkreises

Die R&S®RT-ZC Stromzangen messen Gleich- und Wechselströme präzise, ohne den Stromkreis für die Messung zu unterbrechen. Die besonders großzügig ausgelegte Öffnung der R&S®RT-ZC10 umfasst Stromleiter mit bis zu 20 mm Durchmesser. Mit der R&S®RT-ZC10 sind Spitzenströme bis 300 A (500 A bei einem Einzelpuls) messbar. Für die Messung kleiner aber hochfrequenter Ströme eignet sich die kompaktere R&S®RT-ZC20 mit einer Messbandbreite von 100 MHz.

Die R&S®RT-ZC31 erlaubt die Umschaltung zwischen drei unterschiedlichen Empfindlichkeitsbereichen, um einen sehr großen Dynamikbereich mit hoher Bandbreite abzudecken.

Stabiles Design und einfache Handhabung

Die Stromzangen von Rohde & Schwarz bestechen durch stabiles Design und einfache Handhabung. Die Degauss- und Offsetkorrektur erfolgen direkt am Tastkopfanschluss. Die kompakte R&S®ZA13 externe Stromversorgung versorgt bis zu vier Stromzangen. Auf den R&S®RTO, R&S®RTE, R&S®RTM und R&S®RTA Oszilloskopen sind die Stromzangen als vordefinierte Tastköpfe wählbar.

R&S®RT-ZC20B Stromzange mit Tastkopfschnittstelle von Rohde & Schwarz (100 MHz, 30 A (eff.))

Externes Netzteil zur Stromversorgung von bis zu vier Stromzangen

Einfache Laufzeitkorrektur zur gleichzeitigen Messung von Strömen und Spannungen

Für aussagekräftige Messungen an Leistungselektronik ist ein exakter Zeitbezug zwischen Strom- und Spannungsmessungen entscheidend. Die R&S®RT-ZF20 Laufzeitkalibriereinheit stellt unterschiedliche Testsignale zur Verfügung, mit denen Laufzeitunterschiede zwischen Stromzangen und Spannungstastköpfen von Rohde & Schwarz einfach kompensiert werden können. Die Stromversorgung der Kalibriereinheit erfolgt dabei über den USB-Port des Oszilloskops.

R&S®RT-ZF20 Laufzeitkalibriereinheit zum Laufzeitabgleich: einfache Laufzeitkorrektur für Messungen an Leistungselektronik.

Modell	Bandbreite	Empfindlichkeit	Dynamikbereich	Anstiegs-zeit	Kommentar	Bestellnummer
Tastköpfe						
R&S®RT-ZC02	20 kHz	0,01 V/A, 0,001 V/A	±200 A, ±2000 A	5 µs	Batteriebetrieb	1333.0850.02
R&S®RT-ZC03	100 kHz	0,1 V/A	20 A (eff.), ±30 A (Spitze)	1 µs	Batteriebetrieb	1333.0844.02
R&S®RT-ZC05B	2 MHz	0,01 V/A	500 A (eff.), 700 A (Spitze)	175 ns	Spannungsversorgung über Tastkopfschnittstelle von Rohde & Schwarz	1409.8204.02
R&S®RT-ZC10	10 MHz	0,01 V/A	150 A (eff.), ±300 A (Spitze), ±500 A (Spitze) (Einzelpuls)	35 ns	Spannungsversorgung mit R&S®RT-ZA13	1409.7750K02
R&S®RT-ZC10B	10 MHz	0,01 V/A		35 ns	Spannungsversorgung über Tastkopfschnittstelle von Rohde & Schwarz	1409.8210.02
R&S®RT-ZC15B	50 MHz	0,1 V/A	30 A (eff.), ±50 A (Spitze)	7 ns	Spannungsversorgung über Tastkopfschnittstelle von Rohde & Schwarz	1409.8227.02
R&S®RT-ZC20	100 MHz	0,1 V/A		3,5 ns	Spannungsversorgung mit R&S®RT-ZA13	1409.7766K02
R&S®RT-ZC20B	100 MHz	0,1 V/A		3,5 ns	Spannungsversorgung über Tastkopfschnittstelle von Rohde & Schwarz	1409.8233.02
R&S®RT-ZC30	120 MHz	1 V/A	5 A (eff.), 7,5 A (Spitze)	2,9 ns	Spannungsversorgung mit R&S®RT-ZA13	1409.7772K02
R&S®RT-ZC31	120 MHz	0,1 V/A, 1 V/A, 10 V/A	30 A (eff.), 5 A (eff.), 0,5 A (eff.)	2,9 ns	Spannungsversorgung mit R&S®RT-ZA13	1801.4932K02
Zubehör						
R&S®RT-ZF20					Kalibrationseinheit zur Strom-/ Spannungslaufzeitkorrektur	1800.0004.02
R&S®RT-ZA13					externe Stromversorgung für Stromzangen von Rohde & Schwarz, 4-fach	1409.7789.02

R&S®RT-ZC02/-ZC03 current probes

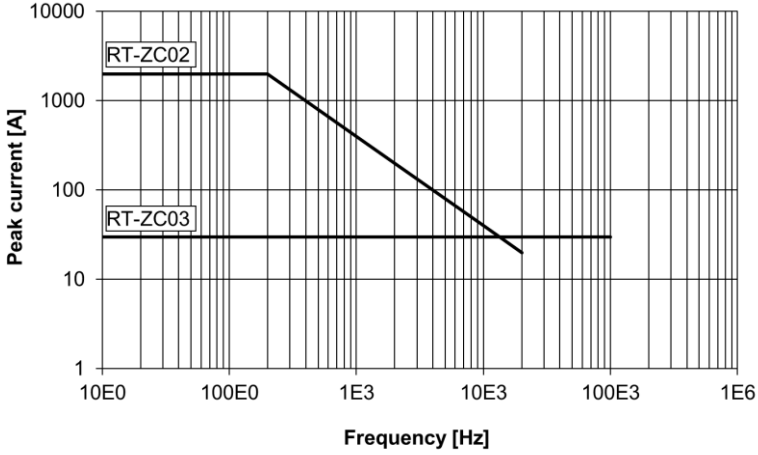
All parameters are valid when the probe is connected to an appropriate Rohde & Schwarz oscilloscope with an input impedance of 1 MΩ. See table on page 4 and Rohde & Schwarz oscilloscope operating manual for more details.

		R&S®RT-ZC02	
Sensitivity setting		0.01 V/A	0.001 V/A
Step response			
Rise time	10 % to 90 %	20 µs (meas.)	
Frequency response			
Bandwidth	–3 dB, starting at DC	20 kHz (meas.)	
DC characteristics			
Dynamic range	derated, see figures on page 36	±200 A	±2000 A
Sensitivity error	+23 °C ±1 °C, ±1500 A	±1 % (meas.)	
	+23 °C ±1 °C, ±2000 A	±5 % (meas.)	
Temperature drift, sensitivity		±0.15 %/°C (meas.)	
Zero error	referenced to probe input after demagnetizing and zero adjustment	±100 mA (meas.)	±500 mA (meas.)
AC characteristics			
Maximum slew rate		±20 A/µs (meas.)	
Maximum rated input			
Maximum continuous current		1000 A (RMS)	
Maximum working voltage	for uninsulated conductors	300 V (RMS) CAT III	
Other			
Noise	with 20 MHz lowpass filter	30 mA (RMS) (meas.)	80 mA (RMS) (meas.)
Base unit			
Input coupling		1 MΩ	

		R&S®RT-ZC03
Step response		
Rise time	10 % to 90 %	1 µs (meas.)
Frequency response		
Bandwidth	–0.5 dB, starting at DC	100 kHz (meas.)
DC characteristics		
Dynamic range	derated, see figures on page 36	±30 A
Sensitivity		0.1 V/A
Sensitivity error	+23 °C ±1 °C	±1 % (meas.)
Temperature drift, sensitivity		±0.01 %/°C (meas.)
Zero error	referenced to probe input after demagnetizing and zero adjustment	±2 mA (meas.)
AC characteristics		
Maximum slew rate		±20 A/µs (meas.)
Maximum rated input		
Maximum continuous current		20 A (RMS)
Maximum working voltage	for uninsulated conductors	300 V (RMS) CAT III
Other		
Noise	with 20 MHz lowpass filter	2 mA (RMS) (meas.)
Base unit		
Input coupling		1 MΩ

General data

		R&S®RT-ZC02	R&S®RT-ZC03
Temperature			
Temperature loading	operating temperature range	0 °C to +50 °C	
	storage temperature range, with battery removed	−20 °C to +85 °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	
Safety		in line with EN 61010-1 in line with EN 61010-2-032 (pollution degree 2)	
RoHS		in line with EN 50581	
EMC		in line with EN 61326-2-2	
Calibration interval		2 years	
Mechanical data			
Dimensions	diameter of probe tip	approx. 32 mm (1.3 in)	approx. 25 mm (1.0 in)
	cable length	approx. 2.0 m (79 in)	
Weight	probe only	approx. 320 g (0.7 lb)	
Probe interface			
Connector		BNC	
Battery type		9 V Alkaline battery, PP3, MN 1604 or IEC6LR61	
Battery lifetime		50 h (meas.)	25 h (meas.)



Maximum rated peak input current versus frequency

R&S®RT-ZC05B/-ZC10(B)/-ZC15B/-ZC20(B)/-ZC30 current 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.

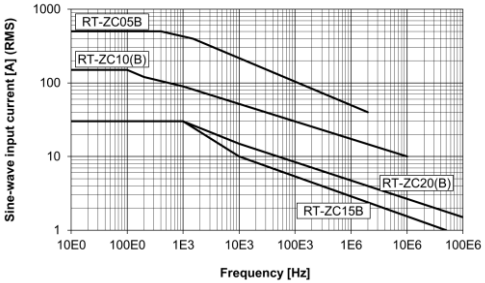
		R&S®RT-ZC05B	R&S®RT-ZC10(B)
Step response			
Rise time	10 % to 90 %, calculated from bandwidth	175 ns	35 ns
Propagation delay		100 ns (meas.)	36 ns (meas.)
Frequency response			
Bandwidth	–3 dB, starting at DC	>2 MHz	>10 MHz
Input impedance		see figure on page 44	
DC characteristics			
Sensitivity		0.01 V/A	
Sensitivity error	+23 °C ±3 °C	±1 %	
Zero error	referenced to probe input after demagnetizing and zero adjustment	±500 mA (meas.)	±100 mA (meas.)
AC characteristics			
AC sensitivity error (sinusoidal, 45 Hz to 66 Hz)	+23 °C ±3 °C	±1 % ± 500 mA (RMS)	±1 % ± 100 mA (RMS)
	0 °C to +40 °C	±3 % ± 500 mA (RMS) (meas.)	±3 % ± 100 mA (RMS) (meas.)
Measurement due to external magnetic fields	400 A/m magnetic field, DC or 60 Hz, referenced to probe input	< 800 mA (RMS) (meas.)	< 150 mA (RMS) (meas.)
Maximum rated input			
Maximum continuous current	derated, see figures on page 44	500 A (RMS)	150 A (RMS)
Maximum transient current	peak	±700 A	±300 A
Other			
Noise	20 MHz measurement bandwidth, referenced to probe input	25 mA (RMS) (meas.)	

		R&S®RT-ZC15B	R&S®RT-ZC20(B)
Step response			
Rise time	10 % to 90 %, calculated from bandwidth	7 ns	3.5 ns
Propagation delay		16.5 ns (meas.)	14.8 ns (meas.)
Frequency response			
Bandwidth	–3 dB, starting at DC	>50 MHz	>100 MHz
Input impedance		see figure on page 44	
DC characteristics			
Sensitivity		0.1 V/A	
Sensitivity error	+23 °C ±3 °C	±1 %	
Zero error	referenced to probe input after demagnetizing and zero adjustment	±10 mA (meas.)	
AC characteristics			
AC sensitivity error (sinusoidal, 45 Hz to 66 Hz)	+23 °C ±3 °C	±1 % ± 10 mA (RMS)	
	0 °C to +40 °C	±3 % ± 10 mA (RMS) (meas.)	
Measurement due to external magnetic fields	400 A/m magnetic field, DC or 60 Hz, referenced to probe input	< 20 mA (RMS) (meas.)	< 5 mA (RMS) (meas.)
Maximum rated input			
Maximum continuous current	derated, see figures on page 44	30 A (RMS)	
Maximum transient current	peak	±50 A	
Other			
Noise	20 MHz measurement bandwidth, referenced to probe input	2.5 mA (RMS) (meas.)	

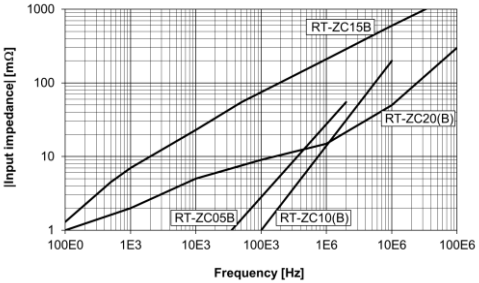
		R&S®RT-ZC30
Step response		
Rise time	10 % to 90 %, calculated from bandwidth	2.9 ns
Frequency response		
Bandwidth	–3 dB, starting at DC	>120 MHz
Input impedance		see figure on page 44
DC characteristics		
Sensitivity		1 V/A
Sensitivity error	+23 °C ±3 °C	±3 %
Zero error	referenced to probe input after demagnetizing and zero adjustment	±1 mA (meas.)
AC characteristics		
AC measurement error (sinusoidal, 45 Hz to 66 Hz)	+23 °C ±3 °C	±3 % ±1 mA (RMS)
	0 °C to +40 °C	±5 % ±1 mA (RMS) (meas.)
Measurement due to external magnetic fields	400 A/m magnetic field, DC or 60 Hz, referenced to probe input	< 5 mA (RMS) (meas.)
Maximum rated input		
Maximum continuous current	derated, see figures on page 44	5 A (RMS)
Maximum transient current	peak	±7.5 A
Other		
Noise	30 MHz measurement bandwidth, referenced to probe input	60 µA (RMS) (meas.)

General data

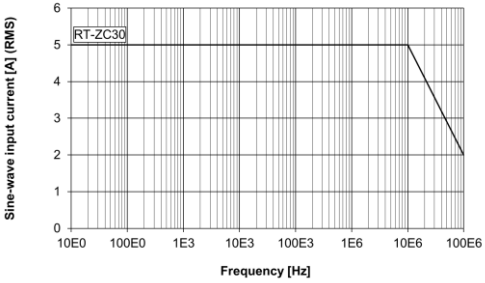
		R&S®RT-ZC05B/ R&S®RT-ZC10(B)	R&S®RT-ZC15B/ R&S®RT-ZC20(B)/ R&S®RT-ZC30
Temperature			
Temperature loading	operating temperature range	0 °C to +40 °C	
	storage temperature range	−10 °C to +50 °C	
Climatic loading		80 % relative humidity	
Altitude	operation	up to 2000 m	
Safety		in line with EN 61010-2-032 (type D sensor, insulated conductor only)	
RoHS		in line with EN 50581	
EMC		in line with EN 61326-1, CISPR 11/EN 55011 (class B, table 2)	
Calibration interval		2 years	
Mechanical data			
Dimensions	max. conductor diameter	approx. 20 mm (0.79 in)	approx. 5 mm (0.2 in)
	cable length, probe	approx. 2 m (78.7 in)	approx. 1.5 m (59 in)
	cable length, power supply of R&S®RT-ZCxx	approx. 1 m (39.4 in)	approx. 1 m (39.4 in)
	probe head (W × H × L, approx.)	27 mm × 69 mm × 176 mm (1.06 in × 2.72 in × 6.93 in)	18 mm × 40 mm × 175 mm (0.71 in × 1.57 in × 6.89 in)
Weight	probe only	approx. 500 g (1.1 lb)	approx. 240 g (0.53 lb)
Probe interface			
Connector	R&S®RT-ZCxx	BNC	
	R&S®RT-ZCxxB	Rohde & Schwarz probe interface	
Supply voltage	R&S®RT-ZCxx	external power supply necessary (e.g. R&S®RT-ZA13) ±12 V ± 0.5 V (5.5 W)	
	R&S®RT-ZCxxB	power supply by Rohde & Schwarz probe interface	



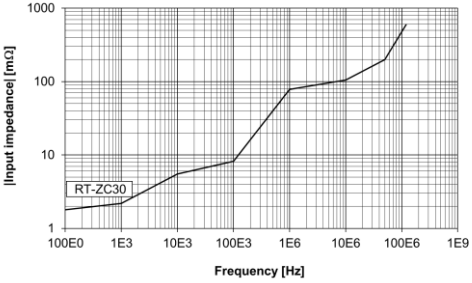
Maximum rated sine-wave root mean square input current versus frequency



Input impedance (meas.)



Maximum rated sine-wave root mean square input current versus frequency



Input impedance (meas.)

R&S®RT-ZC31 current probe

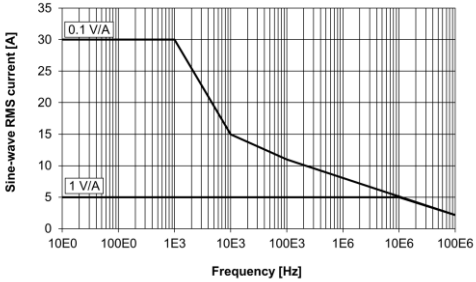
All parameters are valid when the probe is connected to an appropriate Rohde & Schwarz oscilloscope with an input impedance of 1 MΩ. See table on page 4 and Rohde & Schwarz oscilloscope operating manual for more details.

		R&S®RT-ZC31		
Sensitivity setting		0.1 V/A	1 V/A	10 V/A
Step response				
Rise time	10 % to 90 %, calculated from bandwidth	2.9 ns		
Propagation delay		12 ns (meas.)	12 ns (meas.)	13 ns (meas.)
Frequency response				
Bandwidth	–3 dB, starting at DC	>120 MHz		
Input impedance		see figure on page 44		
DC characteristics				
Sensitivity error	+23 °C ±5 °C	±3 %, ±1 % (meas.)		
Zero error	referenced to probe input after demagnetizing and zero adjustment	±10 mA (meas.)	±1 mA (meas.)	±1 mA (meas.)
AC characteristics				
AC measurement error (sinusoidal, 45 Hz to 66 Hz)	+23 °C ±5 °C	±3 % ±10 mA (RMS)	±3 % ±1 mA (RMS)	±3 % ±1 mA (RMS)
	(meas.)	±1 % ±10 mA (RMS)	±1 % ±1 mA (RMS)	±1 % ±1 mA (RMS)
Measurement due to external magnetic fields	400 A/m magnetic field, DC or 60 Hz, referenced to probe input	< 5 mA (RMS) (meas.)		
Maximum rated input				
Maximum continuous current	derated, see figures on page 44	30 A (RMS)	5 A (RMS)	0.5 A (RMS)
Maximum transient current	peak, input for max. 2 s	±50 A	±7.5 A	±0.75 A
Other				
Noise	20 MHz measurement bandwidth, referenced to probe input			60 µA (RMS) (meas.)

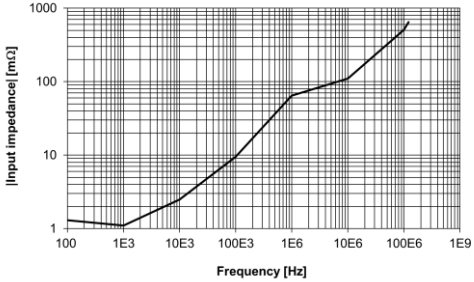
General data

		R&S®RT-ZC31
Temperature		
Temperature loading	operating temperature range	0 °C to +40 °C
	storage temperature range	−10 °C to +50 °C
Climatic loading		80 % relative humidity
Altitude	operation	up to 2000 m
Safety		in line with EN 61010-2-032 (type D sensor, insulated conductor only)
RoHS		in line with EN 50581
EMC		in line with EN 61326-1, CISPR 11/EN 55011 (class B, table 2)
Calibration interval		2 years
Mechanical data		
Dimensions	max. conductor diameter	approx. 5 mm (0.2 in)
	cable length, probe cord	approx. 1.5 m (59.6 in)
	cable length, junction box to interface box	approx. 0.15 m (6.0 in)
	cable length, power cord	approx. 1 m (39.4 in)
	probe head (W × H × L)	approx. 18 mm × 26 mm × 155 mm (0.71 in × 1.02 in × 6.10 in)
	junction box (W × H × L)	approx. 45 mm × 25 mm × 120 mm (1.77 in × 0.98 in × 4.72 in)
	interface box (W × H × L)	approx. 29 mm × 40 mm × 83 mm (1.14 in × 1.57 in × 3.27 in)
Weight	probe only	approx. 370 g (0.82 lb)

Probe interface		
Connector		BNC
Supply voltage		external power supply necessary (e.g. R&S®RT-ZA13) ±12 V ± 0.5 V (7.8 W)



Maximum rated sine-wave root mean square input current versus frequency



Input impedance (meas.)

R&S®RT-ZA13 probe power supply

Electrical data		
Number of channels		4
Output voltage		±12 V ±0.5 V
Maximum output current	sum total of all channels	2.5 A
Power requirements		100 V to 240 V, 50/60 Hz
Maximum rated input power		170 W

General data

Safety		in line with EN 61010-1
RoHS		in line with EN 50581
EMC		in line with EN 61326-1 (class B equipment), EN 61000-3-2, EN 61000-3-3
Mechanical data		
Dimensions	W × H × L	approx. 80 mm × 119 mm × 200 mm (3.1 in × 4.7 in × 7.9 in)
Weight		approx. 1.1 kg (2.4 lb)
Connector		LEMO FFA.OS.304.CLAC44Z

Ordering information

Designation	Type	Order No.
High voltage passive probes		
250 MHz high voltage probe, passive, 100:1, 100 MΩ, 6.5 pF, 850 V (RMS) Incl. adjustment tool; coding clips (set) 2 × 4 colors; signal pin (2); sprung hook 5 mm; ground lead 14 cm; insulating cap; protective cap; operating manual	R&S®RT-ZH03	1333.0873.02
400 MHz high voltage probe, passive, 100:1, 50 MΩ, 7.5 pF, 1 kV (RMS) Incl. adjustment tool; BNC adapter 5.0-L; coding rings (set) 3 × 4 colors; flexible adapter 5.0-L; ground lead 22 cm (2); ground lead 22 cm to 4 mm banana plug; insulating cap 5.0-L; operating manual; protection cap 5.0-L; safety alligator clip (2); solid tip 0.8 mm (5); spring tip 0.8 mm (5); sprung hook 5.0-L (2)	R&S®RT-ZH10	1409.7720.02
400 MHz high voltage probe, passive, 1000:1, 50 MΩ, 7.5 pF, 1 kV (RMS) See R&S®RT-ZH10 for equipment included	R&S®RT-ZH11	1409.7737.02
500 MHz isolated probe, passive, 10:1, 10 MΩ, 12 pF, 1 kV (RMS) CAT III Incl. coding rings (set) 5 × 2 colors; ground lead 32 cm with safety alligator clip; sprung hook; ground pin; operating manual	R&S®RT-ZI10	1326.1761.02
500 MHz isolated probe, passive, 10:1, 10 MΩ, 11 pF, 300 V (RMS) CAT III Incl. coding rings (set) 5 × 2 colors; ground lead with safety alligator clip; sprung hook; ground pin; BNC adapter, operating manual	R&S®RT-ZI10C	1326.3106.02
500 MHz isolated probe, passive, 100:1, 100 MΩ, 4.6 pF, 1 kV (RMS) CAT III Incl. coding rings (set) 5 × 2 colors; ground lead 32 cm with safety alligator clip; sprung hook; ground pin; operating manual	R&S®RT-ZI11	1326.1810.02

Designation	Type	Order No.
Differential probes		
25 MHz differential probe, ±700 V, 1 kV (RMS) CAT III, BNC Incl. sprung hook 4 mm (red, black); safety alligator clip 4 mm (red, black); USB power cord; trimming tool; operating manual	R&S®RT-ZD002	1337.9700.02
25 MHz differential probe, ±1.4 kV, 1 kV (RMS) CAT III, BNC Incl. sprung hook 4 mm (red, black); safety alligator clip 4 mm (red, black); USB power cord; trimming tool; operating manual	R&S®RT-ZD003	1337.9800.02
200 MHz differential probe, ±20 V, BNC Incl. safety alligator clip 4 mm (2); sprung hook 4 mm (2); USB power cord; 9 V battery; carrying case; operating manual	R&S®RT-ZD02	1333.0821.02
800 MHz differential probe, ±15 V, BNC Incl. lead 11 cm (2); lead 7 cm (2); signal pin (6); dual pin (4); mini clip (2); micro clip (2); USB power cord; 9 V battery; carrying case; operating manual	R&S®RT-ZD08	1333.0838.02
200 MHz differential probe, ±750 V, 600 V (RMS) CAT II, Rohde & Schwarz probe interface Incl. R&S®RT-ZA24 accessory kit; R&S®RT-ZA22 test leads; R&S®RT-ZHD protector; carrying case; operating manual	R&S®RT-ZHD07	1800.2307.02
100 MHz differential probe, ±1.5 kV, 1 kV (RMS) CAT III, Rohde & Schwarz probe interface Incl. R&S®RT-ZA24 accessory kit; R&S®RT-ZA22 test leads; R&S®RT-ZHD protector; carrying case; operating manual	R&S®RT-ZHD15	1800.2107.02
200 MHz differential probe, ±1.5 kV, 1 kV (RMS) CAT III, Rohde & Schwarz probe interface Incl. R&S®RT-ZA24 accessory kit; R&S®RT-ZA22 test leads; R&S®RT-ZHD protector; carrying case; operating manual	R&S®RT-ZHD16	1800.2207.02
100 MHz differential probe, ±6 kV, 1 kV (RMS) CAT III, Rohde & Schwarz probe interface Incl. R&S®RT-ZA24 accessory kit; R&S®RT-ZA22 test leads; R&S®RT-ZHD protector; carrying case; operating manual	R&S®RT-ZHD60	1800.2007.02

Designation	Type	Order No.
Current probes		
20 kHz current probe, AC/DC, 0.01/0.001 V/A, 1000 A, 300 V (RMS) CAT III, BNC Incl. operating manual	R&S®RT-ZC02	1333.0850.02
100 kHz current probe, AC/DC, 0.1 V/A, 30 A, 300 V (RMS) CAT III, BNC Incl. operating manual	R&S®RT-ZC03	1333.0844.02
10 MHz current probe, AC/DC, 0.01 V/A, 150 A (RMS), BNC Incl. carrying case; operating manual	R&S®RT-ZC10	1409.7750K02
100 MHz current probe, AC/DC, 0.1 V/A, 30 A (RMS), BNC Incl. carrying case; operating manual	R&S®RT-ZC20	1409.7766K02
120 MHz current probe, AC/DC, 1 V/A, 5 A (RMS), BNC Incl. carrying case; operating manual	R&S®RT-ZC30	1409.7772K02
120 MHz current probe, AC/DC, 0.1 V/A / 1 V/A / 10 V/A, 30 A (RMS), BNC Incl. carrying case; operating manual	R&S®RT-ZC31	1801.4932K02
2 MHz current probe, AC/DC, 0.01 V/A, 500 A (RMS), Rohde & Schwarz probe interface Incl. carrying case; operating manual	R&S®RT-ZC05B	1409.8204.02
10 MHz current probe, AC/DC, 0.01 V/A, 150 A (RMS), Rohde & Schwarz probe interface Incl. carrying case; operating manual	R&S®RT-ZC10B	1409.8210.02
50 MHz current probe, AC/DC, 0.1 V/A, 30 A (RMS), Rohde & Schwarz probe interface Incl. carrying case; operating manual	R&S®RT-ZC15B	1409.8227.02
100 MHz current probe, AC/DC, 0.1 V/A, 30 A (RMS), Rohde & Schwarz probe interface Incl. carrying case; operating manual	R&S®RT-ZC20B	1409.8233.02

Designation	Type	Order No.
Accessories and sets		
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
Probe box to N/USB adapter	R&S®RT-ZA9	1417.0909.02
SMA(f) to BNC(m) adapter	R&S®RT-ZA10	1416.0457.02
Adapter BNC to 4 mm dual banana	R&S®RT-ZA11	1333.0796.02
Probe power supply	R&S®RT-ZA13	1409.7789.02
Spare accessory set for R&S®RT-ZI10/11 isolated probes Contains: insulating sleeve (2), reference contact (2), reference leads with crocodile clip, color clips, sprung hook	R&S®RT-ZA20	1326.1978.02
Extended accessory set for R&S®RT-ZI10/11 isolated probes Contains: jaw clip, safety jaw clip, reference lead with 4 mm connector, reference lead with hook clip, 4 mm test probe, BNC connector, dual 4 mm to safety BNC adapter	R&S®RT-ZA21	1326.1984.02
Multimeter test leads, two leads (red/black), 1000 V CAT III	R&S®RT-ZA22	1326.0988.02
Accessory kit for R&S®RT-ZHD high-voltage differential probes Contains: safety alligator clip (red/black); pincer clip (red/black); test clip (red/black); spade terminal (red/black); lead 17 cm (red/black); lead 100 cm (red/black)	R&S®RT-ZA24	1800.2707.02
Probe positioner, 2 legged	R&S®RT-ZA29	1801.4803.02
Probe tip accessory set for R&S®RT-ZP03, R&S®RT-ZP05S, R&S®RT-ZH03 passive voltage probes Contains: ground lead; retractable hook; adjustment tool; protection cap; identification tags; IC insulating cap; solid probe tip (2); spring-loaded probe tip (2); ground clip; BNC adapter	R&S®RT-ZA40	1338.0742.02
3D probe positioner	R&S®RT-ZAP	1326.3641.02
Power deskew fixture	R&S®RT-ZF20	1800.0004.02

Service options		
Extended warranty, one year	R&S®WE1	Contact your local Rohde & Schwarz sales office.
Extended warranty, two years	R&S®WE2	
Extended warranty, three years	R&S®WE3	
Extended warranty, four years	R&S®WE4	
Extended warranty with calibration coverage, one year	R&S®CW1	
Extended warranty with calibration coverage, two years	R&S®CW2	
Extended warranty with calibration coverage, three years	R&S®CW3	
Extended warranty with calibration coverage, four years	R&S®CW4	
Extended warranty with accredited calibration coverage, one year	R&S®AW1	
Extended warranty with accredited calibration coverage, two years	R&S®AW2	
Extended warranty with accredited calibration coverage, three years	R&S®AW3	
Extended warranty with accredited calibration coverage, four years	R&S®AW4	

Extended warranty with a term of one to four years (WE1 to WE4)
Repairs carried out during the contract term are free of charge [5]. Necessary calibration and adjustments carried out during repairs are also covered.

Extended warranty with calibration (CW1 to CW4)
Enhance your extended warranty by adding calibration coverage at a package price. This package ensures that your Rohde & Schwarz product is regularly calibrated, inspected and maintained during the term of the contract. It includes all repairs [5] and calibration at the recommended intervals as well as any calibration carried out during repairs or option upgrades.

Extended warranty with accredited calibration (AW1 to AW4)
Enhance your extended warranty by adding accredited calibration coverage at a package price. This package ensures that your Rohde & Schwarz product is regularly calibrated under accreditation, inspected and maintained during the term of the contract. It includes all repairs [5] and accredited calibration at the recommended intervals as well as any accredited calibration carried out during repairs or option upgrades.

[5] Excluding defects caused by incorrect operation or handling and force majeure. Wear-and-tear parts are not included.

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ISO 9001

Certified Environmental Management
ISO 14001

PD 5214.2362.22 | Version 25.00 | November 2023 (sk)
R&S®RT-Zxx High Voltage and Current Probes
Data without tolerance limits is not binding | Subject to change

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