

R&S® PR200

PORTABLE MONITORING RECEIVER

Specifications



Data Sheet
Version 06.00

ROHDE & SCHWARZ
Make ideas real



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Definitions

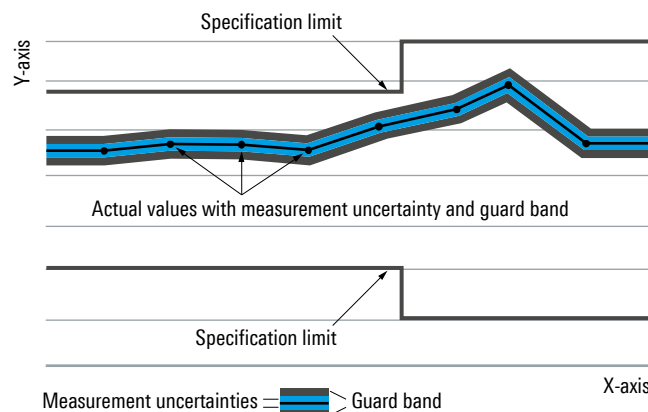
General

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
- All internal automatic adjustments performed, if applicable

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 $<$, \leq , $>$, \geq , \pm , 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.



Non-traceable specifications with limits (n. trc.)

Represent product performance that is specified and tested as described under “Specifications with limits” above. However, product performance in this case cannot be warranted due to the lack of measuring equipment traceable to national metrology standards. In this case, measurements are referenced to standards used in the Rohde & Schwarz laboratories.

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.

Nominal values (nom.)

Characterize product performance by means of a representative value for the given parameter (e.g. nominal impedance). In contrast to typical data, a statistical evaluation does not take place and the parameter is not tested during production.

Measured values (meas.)

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

Uncertainties

Represent limits of measurement uncertainty for a given measurand. Uncertainty is defined with a coverage factor of 2 and has been calculated in line with the rules of the Guide to the Expression of Uncertainty in Measurement (GUM), taking into account environmental conditions, aging, wear and tear.

Device settings and GUI parameters are designated with the format “parameter: value”.

Non-traceable specifications with limits, typical data as well as nominal and measured values are not warranted by Rohde & Schwarz.

In line with the 3GPP/3GPP2 standard, chip rates are specified in million chips per second (Mcps), whereas bit rates and symbol rates are specified in billion bits per second (Gbps), million bits per second (Mbps), thousand bits per second (kbps), million symbols per second (Msps) or thousand symbols per second (ksps), and sample rates are specified in million samples per second (Msample/s). Gbps, Mcps, Mbps, Msps, kbps, ksps and Msample/s are not SI units.

Specifications

Frequency

Frequency range	receive mode	8 kHz to 8 GHz
	DF mode	20 MHz to 6 GHz
Tuning resolution		1 Hz
BFO		0 Hz to ± 8 kHz
Frequency accuracy	base unit	$\leq 2 \times 10^{-7}$
	GPS aided ¹ , averaged over 24 h	$< \pm 1 \times 10^{-11}$, $\pm 1 \times 10^{-12}$ (typ.)
Short term stability ²	$\tau = 2$ s	$\sigma = 2 \times 10^{-9}$
Input for external reference		10 MHz
Phase noise	8 kHz $\leq f \leq 35$ MHz	≤ -135 dBc (1 Hz) at 10 kHz offset
		≤ -135 dBc (1 Hz) at 100 kHz offset
		≤ -135 dBc (1 Hz) at 1 MHz offset
	35 MHz $< f \leq 3.3$ GHz	≤ -95 dBc (1 Hz) at 10 kHz offset
		≤ -95 dBc (1 Hz) at 100 kHz offset
		≤ -110 dBc (1 Hz) at 1 MHz offset
	3.3 GHz $< f \leq 5.3$ GHz	≤ -88 dBc (1 Hz) at 10 kHz offset
		≤ -88 dBc (1 Hz) at 100 kHz offset
		≤ -110 dBc (1 Hz) at 1 MHz offset
	5.3 GHz $< f \leq 8$ GHz	≤ -85 dBc (1 Hz) at 10 kHz offset
		≤ -95 dBc (1 Hz) at 100 kHz offset
		≤ -110 dBc (1 Hz) at 1 MHz offset

Linearity

Second order intercept point (SOI)		
8 kHz to 35 MHz	low distortion mode	≥ 45 dBm
	normal mode	≥ 15 dBm
35 MHz to 8 GHz	low distortion mode	30 dBm (typ.)
	normal mode	30 dBm (typ.)
Third order intercept point (TOI)		
8 kHz to 35 MHz	low distortion mode (150 kHz spacing at -10 dBm)	
	1 MHz $\leq f \leq 10$ MHz	≥ 30 dBm
	10 MHz $< f \leq 35$ MHz	≥ 30 dBm
	normal mode (150 kHz spacing at -25 dBm)	
	1 MHz $\leq f \leq 10$ MHz	≥ 10 dBm
	10 MHz $< f \leq 35$ MHz	≥ 14 dBm
35 MHz to 8 GHz	low distortion mode	
	(2.8 MHz spacing at -30 dBm)	
	35 MHz $< f \leq 3.3$ GHz	≥ 5 dBm
	(2.8 MHz spacing at -40 dBm)	
	3.3 GHz $< f \leq 5.3$ GHz	≥ -3 dBm
	(2.8 MHz spacing at -35 dBm)	
	5.3 GHz $< f \leq 8$ GHz	≥ -3 dBm
	normal mode	
	(2.8 MHz spacing at -40 dBm)	
	35 MHz $< f \leq 3.3$ GHz	≥ -6 dBm
	(2.8 MHz spacing at -50 dBm)	
	3.3 GHz $< f \leq 5.3$ GHz	≥ -15 dBm
	(2.8 MHz spacing at -50 dBm)	
	5.3 GHz $< f \leq 8$ GHz	≥ -17 dBm

¹ Conditions: good GNSS signal, constant GNSS antenna position, GNSS antenna position known with standard deviation $\sigma < 1.5$ m, constant temperature.

² After 20 min operation, ambient temperature drift $< 1^\circ$ K/min.

Interference rejection

Image rejection	$8\text{ kHz} \leq f \leq 35\text{ MHz}$	direct reception (no image frequency present)
	$35\text{ MHz} < f \leq 1\text{ GHz}$	$\geq 90\text{ dB}$
	$1\text{ GHz} < f \leq 5.3\text{ GHz}$	$\geq 75\text{ dB}$
	$5.3\text{ GHz} < f \leq 8\text{ GHz}$	60 dB (typ.)
Intermediate frequency rejection IF1, IF2, IF3	$8\text{ kHz} \leq f \leq 35\text{ MHz}$	direct reception (no IF present)
	$35\text{ MHz} < f \leq 8\text{ GHz}$	$\geq 75\text{ dB}$

Noise figure

1 MHz to 35 MHz	normal mode	
	$1\text{ MHz} < f \leq 10\text{ MHz}$	$\leq 19\text{ dB}$
	$10\text{ MHz} < f \leq 35\text{ MHz}$	$\leq 16\text{ dB}$
	low noise mode	
	$1\text{ MHz} < f \leq 10\text{ MHz}$	$\leq 16\text{ dB}$
	$10\text{ MHz} < f \leq 35\text{ MHz}$	$\leq 12\text{ dB}$
35 MHz to 8 GHz	normal mode	
	$35\text{ MHz} < f \leq 3.3\text{ GHz}$	$\leq 16\text{ dB}$, 15 dB (typ.)
	$3.3\text{ GHz} < f \leq 5.3\text{ GHz}$	$\leq 20\text{ dB}$, 18 dB (typ.)
	$5.3\text{ GHz} < f \leq 7.5\text{ GHz}$	$\leq 23\text{ dB}$, 21 dB (typ.)
	$7.5\text{ GHz} < f \leq 8\text{ GHz}$	$\leq 28\text{ dB}$, 27 dB (typ.)
	low noise mode	
	$35\text{ MHz} < f \leq 3.3\text{ GHz}$	$\leq 10\text{ dB}$, 8 dB (typ.)
	$3.3\text{ GHz} < f \leq 5.3\text{ GHz}$	$\leq 12\text{ dB}$, 10 dB (typ.)
	$5.3\text{ GHz} < f \leq 7.5\text{ GHz}$	$\leq 17\text{ dB}$, 15 dB (typ.)
	$7.5\text{ GHz} < f \leq 8\text{ GHz}$	$\leq 20\text{ dB}$, 18 dB (typ.)

Displayed average noise level (DANL)

0 dB RF attenuation, termination 50 Ω , span = 100 kHz, RBW = 100 Hz, normalized to 1 Hz		
8 kHz to 35 MHz	low noise mode	
	$1\text{ MHz} < f \leq 10\text{ MHz}$	$\leq -158\text{ dBm}$ (1 Hz)
	$10\text{ MHz} < f \leq 35\text{ MHz}$	$\leq -162\text{ dBm}$ (1 Hz)
35 MHz to 8 GHz	low noise mode	
	$35\text{ MHz} < f \leq 3.3\text{ GHz}$	$\leq -164\text{ dBm}$ (1 Hz)
	$3.3\text{ GHz} < f \leq 5.3\text{ GHz}$	$\leq -162\text{ dBm}$ (1 Hz)
	$5.3\text{ GHz} < f \leq 7.5\text{ GHz}$	$\leq -157\text{ dBm}$ (1 Hz)
	$7.5\text{ GHz} < f \leq 8\text{ GHz}$	$\leq -154\text{ dBm}$ (1 Hz)

Sensitivity

Sensitivity (demodulation)		measurement using telephone filter in line with ITU-T
8 kHz to 35 MHz	low noise mode	
	AM: bandwidth = 6 kHz, SINAD = 12 dB, $f_{\text{mod}} = 1 \text{ kHz}$, $m = 0.5$	$\leq -99 \text{ dBm}$, $1 \text{ MHz} < f \leq 10 \text{ MHz}$
		$\leq -107 \text{ dBm}$, $10 \text{ MHz} < f \leq 35 \text{ MHz}$
	FM: bandwidth = 9 kHz, SINAD = 20 dB, $f_{\text{mod}} = 1 \text{ kHz}$, deviation = 2.4 kHz	$\leq -97 \text{ dBm}$, $1 \text{ MHz} < f \leq 10 \text{ MHz}$
		$\leq -97 \text{ dBm}$, $10 \text{ MHz} < f \leq 35 \text{ MHz}$
	CW: bandwidth = 600 Hz, SINAD = 10 dB	$\leq -97 \text{ dBm}$, $1 \text{ MHz} < f \leq 10 \text{ MHz}$
35 MHz to 8 GHz		$\leq -107 \text{ dBm}$, $10 \text{ MHz} < f \leq 35 \text{ MHz}$
	low noise mode	
	AM: bandwidth = 6 kHz, SINAD = 12 dB, $f_{\text{mod}} = 1 \text{ kHz}$, $m = 0.5$	$\leq -110 \text{ dBm}$, $35 \text{ MHz} < f \leq 3.3 \text{ GHz}$
		$\leq -107 \text{ dBm}$, $3.3 \text{ GHz} < f \leq 6 \text{ GHz}$
		$\leq -102 \text{ dBm}$, $6 \text{ GHz} < f \leq 7.5 \text{ GHz}$
		$\leq -92 \text{ dBm}$, $7.5 \text{ GHz} < f \leq 8 \text{ GHz}$
	FM: bandwidth = 15 kHz, SINAD = 20 dB, $f_{\text{mod}} = 1 \text{ kHz}$, deviation = 5 kHz	$\leq -107 \text{ dBm}$, $35 \text{ MHz} < f \leq 3.3 \text{ GHz}$
		$\leq -107 \text{ dBm}$, $3.3 \text{ GHz} < f \leq 6 \text{ GHz}$
		$\leq -102 \text{ dBm}$, $6 \text{ GHz} < f \leq 7.5 \text{ GHz}$
		$\leq -92 \text{ dBm}$, $7.5 \text{ GHz} < f \leq 8 \text{ GHz}$
	CW: bandwidth = 600 Hz, SINAD = 10 dB	$\leq -110 \text{ dBm}$, $35 \text{ MHz} < f \leq 3.3 \text{ GHz}$
		$\leq -107 \text{ dBm}$, $3.3 \text{ GHz} < f \leq 6 \text{ GHz}$
		$\leq -102 \text{ dBm}$, $6 \text{ GHz} < f \leq 8 \text{ GHz}$

Probability of intercept (100 % POI)

Probability of intercept	span = 40 MHz, RBW = 1 MHz, FFT overlap = 50 %	$t_{100 \% \text{ POI}} = 1.5 \mu\text{s (nom.)}$
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Demodulation

Demodulation modes	all IF bandwidths	AM, FM, PM, pulse, I/Q
	IF bandwidths $\leq 9 \text{ kHz}$	LSB, USB, CW
	IF bandwidths $\geq 1 \text{ kHz}$	ISB
Squelch (squelch level)	in 1 dB steps	-30 dB μV to +130 dB μV
Gain control		AGC, MGC, 160 dB (-30 dB μV to 130 dB μV)
	AGC mode	fast/default/slow
	MGC	settable in 1 dB steps
Automatic frequency control (AFC)		automatic retuning for frequency-unstable signals $\pm \frac{1}{2}$ IF bandwidth (100 Hz to 40 MHz)

IF bandwidth

Bandwidth ³	demodulation, level and offset measurement (3 dB bandwidth), 38 filters	100/150/300/600 Hz, 1/1.5/2.1/2.4/2.7/3.1/4.8/6/ ATC8.333/9/12/15/ATC25/30/50/75/120/ 150/250/300/500/800 kHz, 1/1.25/1.5/2/5/8/10/12.5/15/20/40 MHz
Shape factor ³	3 dB:60 dB	≤ 1:1.6 for filters up to 10 MHz
	3 dB:50 dB	≤ 1:1.6 for filters 12.5 MHz to 40 MHz

A/D converter (ADC) resolution

Resolution	14 bit
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Level and offset measurement

Signal level		–30 dBμV to 120 dBμV, resolution 0.1 dB
Level accuracy	100 kHz to 8 GHz –10 °C to +55 °C	±3 dB (max.)
Level detector		peak, RMS, average, fast
Measurement modes		continuous, periodic
Measurement time		100 μs to 900 s or automatic
Frequency offset		up to ±½ IF bandwidth (100 Hz to 40 MHz), resolution 1 Hz

IF panorama

FFT realtime IF panorama	up to 4096 points FFT	dynamic, overlapping FFT
	operating mode	automatic or variable with selectable frequency resolution
		0.625/1.25/2.5/3.125/6.25/12.5/25/31.25/ 50/62.5/100/125/200/250/500/625 Hz, 1/1.25/2/2.5/3.125/5/6.25/8.333/10/12.5/ 20/25/50/100/200/500 kHz, 1 MHz/2 MHz
IF panorama span		1/2/5/10/20/50/100/200/500 kHz, 1/2/5/10/20/40 MHz
Panorama display	trace mode	clear/write, max. hold, min. hold, average
	display mode	auto peak, positive peak
	FFT detector	auto peak, positive peak, negative peak, average, sample

³ Measurement of IF filter in line with ITU recommendation ITU-R SM.1836.

Modulation measurement (with R&S®CS-MM option)

AM (modulation index)		AM, AM+, AM-, m = 0 % to 999.9 %, resolution = 0.1 %, $f_{\max} = 20 \text{ MHz}$
Display error		< 5 % (nom.) for bandwidths $\leq 1 \text{ MHz}$, < 7 % (nom.) for bandwidths > 1 MHz (S/N > 40 dB, AF = 1 kHz, measurement time = 1 s)
FM (FM deviation)		FM, FM+, FM-, $\Delta f = 0 \text{ Hz}$ to 20 MHz, resolution = 1 Hz , $f_{\max} = 20 \text{ MHz}$ (f_{mod} + deviation)
Display error		< 2 % (nom.) of set IF bandwidth (absolute) (S/N > 40 dB, AF = 1 kHz, measurement time = 1 s)
ϕM (PM)		$\Delta\phi = 0 \text{ rad}$ to 12.5 rad, resolution = 0.01 rad, $f_{\max} = 20 \text{ MHz}$ (f_{mod} + deviation)
Display error		< (0.1 rad + 3 % of display) (nom.) (S/N > 40 dB, AF = 1 kHz, measurement time = 1 s)

Scan characteristics

Memory scan		10000 programmable memory address
	speed	up to 1000 channels/s
Frequency scan		user-selectable start/stop frequency and step width
	speed	up to 2000 channels/s ⁴
Panorama scan	with R&S®CS-PS option	RF spectrum with user-selectable start/stop frequency and step width: 100/125/200/250/500/625 Hz, 1/1.25/2/2.5/3/3.125/5/6.25/8.333/10/12.5/ 20/25/50/100/200/500 kHz, 1 MHz, 2 MHz
	speed	47 GHz/s (at 1 MHz RBW), 44 GHz/s (at 100 kHz RBW), 36 GHz/s (at 25 kHz RBW)

Antenna input

Antenna input	HF/VHF/UHF/SHF combined	1 input, SnapN female, 50 Ω
VSWR with preamplifier on	$8 \text{ kHz} \leq f \leq 3.3 \text{ GHz}$	≤ 2 (nom.)
	$3.3 \text{ GHz} < f \leq 8 \text{ GHz}$	≤ 2.4 (nom.)
VSWR with preamplifier off	$8 \text{ kHz} \leq f \leq 8 \text{ GHz}$	≤ 2 (nom.)
Input level	$8 \text{ kHz} \leq f \leq 3.3 \text{ GHz}$	-117 dBm to +3 dBm
	$3.3 \text{ GHz} < f \leq 8 \text{ GHz}$	-117 dBm to -17 dBm
Maximum input level (nondestructive)		+20 dBm
Oscillator reradiation at antenna input		< -93 dBm
Preselection	8 kHz to 35 MHz	lowpass filter
	20 MHz to 80 MHz, span > 10 MHz	highpass/lowpass
	20 MHz to 80 MHz, span $\leq 10 \text{ MHz}$	tracking filter
	80 MHz to 1.5 GHz	tracking filter
	1.4 GHz to 3.350 GHz	bandpass filter
	3.350 GHz to 8 GHz	bandpass combination
	switchable attenuation	manual or automatic
		up to 40 dB in steps of 1dB, depending on the receiver mode

⁴ Level detector: fast, scan step width 12.5 kHz and demodulation bandwidth 2 MHz.

I/Q data

I/Q, digital	LAN	I/Q bandwidth ≤ 1 MHz
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Inputs and outputs

Ref In/Out	10 MHz reference configurable as input or output	input level: 0 dBm to +10 dBm output level: 0 dBm to +10 dBm
GNSS Ant	input for connection of an external GNSS antenna (GPS, GLONASS, BeiDou and Galileo), active or passive	SMA female connector, 50 Ω
Analog audio	headphone connector	3.5 mm port 0 V to ≥ 2 V, $R_i = 100 \Omega$, $f_{\min} = 10$ Hz to 300 Hz, $f_{\max} = 12.5$ kHz (depends on IF filter and modulation)
LAN	for data transfer and remote control	RJ-45, 1 Gbit LAN interface (Ethernet 10/100/1000BASE-T)
USB	for external storage, keyboard and mouse	1 USB 2.0 Type-A port
SD card	SD HC	32 Gbyte (max.)
	SD XC	256 Gbyte (max.)
AUX1 connector	control signals for DF and handheld antenna	serial RS-422 and RS-485, LVTTTL, +5 V, trigger input
AUX2 connector		serial RS-232 and LVTTTL, +5 V, 1PPS input, squelch output

DF mode (with R&S®CS-DF option)

DF method		see R&S®ADDx single-channel DF antennas data sheet, PD 3606.8295.22
Instrument DF accuracy	across entire frequency range	0.5° RMS
System DF accuracy	in reflection-free environment, depends on DF antenna	1° RMS (typ.), see R&S®ADDx single-channel DF antennas data sheet, PD 3606.8295.22
DF sensitivity	depends on DF antenna	see R&S®ADDx single-channel DF antennas data sheet, PD 3606.8295.22
Minimum signal duration	for single burst signal	
	R&S®ADD107	2 ms
	R&S®ADD207	1.5 ms
	R&S®ADD307	1.5 ms
	R&S®ADD317	1.5 ms
Minimum burst duration	for multiple burst signals	0.5 ms (typ.)
Display resolution	adjustable	0.1° or 1°
DF bandwidth	depends on set span	50/100/150/300/600 Hz, 1/1.5/2.1/2.4/2.7/3.1/4/4.8/6/8.333/9/12/15/ 25/30/50/75/120/150/250/300/500/800/1000/ 1250 kHz/ 1.5 MHz/2 MHz
Operating mode		FFM FSCAN MSCAN
Squelch mode		off, gate, normal
Supported DF antennas		R&S®ADD107, R&S®ADD207, R&S®ADD307, R&S®ADD317
DF modulation types		all

GNSS

Receiver type	72 channel GPS L1C/A, SBAS L1C/A, QZSS L1C/A, QZSS L1 SAIF, GLONASS L1OF BeiDou B1 Galileo E1B/C	
Time to first fix (all satellites –130 dBm) (cold start)	GPS	29 s (nom.)
Horizontal position accuracy (CEP, 50 %, 24 h static, –130 dBm, > 6 SVs)	GPS	2.5 m (nom.)
Accuracy of PPS (with good GPS signal conditions)	clear sky	≤ 20 ns (nom.)
Antenna	active	+ 3.3 V
	passive	

Timestamps (with R&S®CS-TSA option)

Timestamp accuracy ^{5, 6} over frequency	with external reference frequency, with regard to externally supplied PPS	
	1 MHz to 5 MHz	< ±200 ns
	5 MHz to 32 MHz	< ±120 ns
	32 MHz to 8 GHz	< ±50 ns, ±25 ns (typ.)
Timestamp accuracy, GNSS aided ^{5, 6, 7, 8}	standard deviation for 2000 measurements	< 50 ns

⁵ Measured with 40 MHz span, 150 kHz demodulation bandwidth.

⁶ Timestamp referenced to antenna input.

⁷ Conditions: good GNSS signal, constant GNSS antenna position, GNSS antenna position known with standard deviation $\sigma < 1.5$ m, constant temperature.

⁸ 250 MHz frequency, TDOA generator and receiver GNSS-synchronized with separate GNSS antennas, identical satellite view.

General data

Temperature		
Operating temperature range	with battery (operating mode: discharge)	–10 °C to +55 °C
	with battery (operating mode: charge)	0 °C to +45 °C
	with external power supply	–10 °C to +55 °C
Storage temperature range		–20 °C to +70 °C
Climatic loading		+25 °C/+55 °C at 95 % relative humidity, in line with EN 60068-2-1, EN 60068-2-2, EN 60068-2-30
Mechanical resistance		
Shock		40 g shock spectrum, in line with MIL-STD-810G, method 516.6, procedure I, MIL-PRF-28800F, class 2
Vibration	sinusoidal	5 Hz to 150 Hz, max. 1.8 g at 55 Hz, 0.5 g from 55 Hz to 150 Hz, in line with EN 60068-2-6, MIL-PRF-28800F, class 2
	random	8 Hz to 650 Hz, acceleration 1.9 g (RMS), in line with EN 60068-2-64, MIL-PRF-28800F class 2
Protection class		IP51, in line with IEC 60529
	with R&S®HA-Z222 carrying holster and rain cap	IP54, in line with IEC 60529
Altitude		
Operating	with battery	4600 m (max.) (15000 ft) above sea level
Nonoperating		12000 m above sea level
Electromagnetic compatibility		in line with: <ul style="list-style-type: none"> • ETSI EN 301489-1/-22 • Draft ETSI EN 301489-19 • ETSI EN 300220/300330/300440 (antenna port only) • ETSI EN 303413 (GNSS antenna port) • EN 55032, class B
Electrical safety		in line with: <ul style="list-style-type: none"> • DIN EN 61010-1:2011-07 • IEC 61010-1:2010 • EN 61010-1:2010-10 • UL 61010-1: 2012-05 • CAN/CSA-C22.2 No. 61010-1-12
Power supply/battery		
Power consumption		16 W (typ.)
Power supply	input	100 V to 240 V AC, 50/60 Hz, 1.5 A
	output	15 V DC ± 10 %, 4 A
	protection class	I
	operating altitude	up to 4600 m above sea level
Battery (lithium-ion, 6 cells)	operating time	
	in receive mode	approx. 3.5 h
	charging time	approx. 3 h (instrument switched off)
Mechanical data		
Dimensions	W × H × D	approx. 192 mm × 320 mm × 62 mm (7.56 in × 12.60 in × 2.44 in)
Weight	including battery	approx. 3.5 kg (7.72 lb)
Display		
Type		6.5" color TFT LCD
Resolution		640 × 480 pixel
MTBF (EN/IEC 61709)		30100 h
Certifications		VDE, cCSAus, KC

Ordering information

Designation	Type	Order No.
Base unit (including accessories such as power cord and manual)		
Portable monitoring receiver IF spectrum (max. 40 MHz), spectrogram (waterfall display), 6-cell lithium-ion battery, plug-in power supply, SD card for storing user settings, shoulder strap	R&S®PR200	4500.5002.02
Documentation of calibration values	R&S®CS-DCV	4500.7011.02
Software options		
Polychrome spectrum	R&S®CS-PC	4500.7040.02
Panorama scan	R&S®CS-PS	4500.7070.02
Mapping and geotagging application, includes support for map display, triangulation, and geotagging	R&S®CS-MAP	4500.7140.02
Timestamp accuracy and external GNSS, includes support for externally connected GNSS- and compass-devices and also synchronization of 1PPS to 10 MHz reference	R&S®CS-TSA	4500.7170.02
Field strength measurement	R&S®CS-FS	4500.7211.02
Time domain measurement	R&S®CS-ZS	4500.7111.02
Direction finding support	R&S®CS-DF	4500.7370.02
Trace recording and replay	R&S®CS-IR	4500.7240.02
Modulation measurement	R&S®CS-MM	4500.7340.02

Service options		
Extended warranty, one year	R&S®WE1	Please 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 ⁹. 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 ⁹ 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 ⁹ and accredited calibration at the recommended intervals as well as any accredited calibration carried out during repairs or option upgrades.

⁹ Excluding defects caused by incorrect operation or handling and force majeure. Wear-and-tear parts are not included.

Service that adds value

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

Rohde & Schwarz

The Rohde & Schwarz electronics group offers innovative solutions in the following business fields: test and measurement, broadcast and media, secure communications, cybersecurity, monitoring and network testing. Founded more than 80 years ago, the independent company which is headquartered in Munich, Germany, has an extensive sales and service network with locations in more than 70 countries.

www.rohde-schwarz.com

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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