



R&S®EM200 DIGITAL COMPACT RECEIVER

Spectrum monitoring and direction finding in a compact format

The perfect choice for

Detecting, identifying and direction finding emission sources

Wide, continuous I/Q streaming

A handoff receiver in a networked system

Saving space and reducing power consumption



Key specifications	
Frequency range	8 kHz to 8 GHz
Real-time bandwidth	40 MHz
I/Q streaming	1 MHz (standard) / 40 MHz (option)
DC input	10 V to 32 V DC, 3.3 A to 1.0 A
Power consumption	typ. 18 W to 20 W, depends on options
Dimensions (W × H × D) – benchtop version	approx. 247 mm × 55 mm × 401 mm (9.72 in × 2.17 in × 15.79 in)
Weight	approx. 3.5 kg (7.7 lb)

High degree of scalability in a small form factor

The R&S®EM200 digital compact monitoring receiver is a cost-efficient and optimized solution for remote controlled spectrum monitoring and direction finding. It detects and demodulates emissions from 8 kHz to 8 GHz and optionally supports direction finding with compact Rohde & Schwarz DF antennas from 20 MHz to 6 GHz. Its compact format allows easy integration and use in just a few steps. The R&S®EM200 has an easy-to-operate and ready-to-use graphical user interface.

Your benefit	Features
Easy to set up and integrate	<ul style="list-style-type: none"> ▶ Saves space as a standalone, combined or integrated system due to its ½ 19" width, one height unit and low weight
Compact, configurable and upgradeable via keycodes	<ul style="list-style-type: none"> ▶ Comprehensive tools for spectrum monitoring, spectral measurements, direction finding (AoA), time domain measurements, measurements in line with ITU recommendations and more ▶ The sophisticated preselection stage and adaptive attenuation of the R&S®EM200 provides reliable protection against overloading from strong input signals
Well-balanced design and RF performance even with minimal size, weight and power (SWAP)	<ul style="list-style-type: none"> ▶ Parallel signal processing of spectral and demodulation path for undisturbed signal monitoring and demodulation ▶ High measurement bandwidth of up to 40 MHz is ideal even for measuring the signal level of modern digital signals ▶ Low power consumption enables long-term operation from an autonomous power source
Compatible with various software and hardware from Rohde & Schwarz for automation and scalability	<ul style="list-style-type: none"> ▶ Automation with Rohde & Schwarz system software such as R&S®ARGUS, R&S®RAMON and the R&S®CA100/R&S®CA120 PC based signal analysis software ▶ Scalable with multiple R&S®EM200 and Rohde & Schwarz scanning receivers, direction finders, signal analyzers and recorders ▶ Future-proof and modular



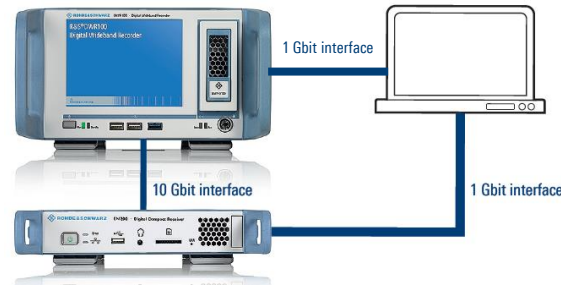
For more information, visit www.rohde-schwarz.com/product/EM200

Compatible with a wide range of powerful Rohde & Schwarz system software modules to support users with automation in various fields



Multiple R&S®EM200 digital compact monitoring receivers can be operated together with one or more Rohde & Schwarz receivers and direction finders. For example, systems can be easily networked with R&S®RAMON software, allowing adaptation to a variety of communications systems and data transmission bandwidths.

Ideal for use in signal interception systems and in combination with Rohde & Schwarz signal analysis software, recorders and most receivers and direction finders



R&S®EM200 equipped with the R&S®CS-10G option and the R&S®DWR100 digital wideband recorder for recording signals with a bandwidth up to 40 MHz

Convenient and ready-to-use virtual front panel control



The virtual front panel control software offers full receiver functionalities and is helpful as a reference tool when using the R&S®EM200 for third-party applications, as well as for troubleshooting and simple analysis

Feature highlights

- ▶ High scan speed of up to 47 GHz/s
- ▶ Extensive preselection consisting of tracking, bandpass, high pass, low pass and combination of filters
- ▶ Up to 40 MHz wide I/Q stream with 10 Gbit interface (option)
- ▶ Parallel time and frequency domain analysis up to 40 MHz bandwidth
- ▶ Wide range of apps (software) extendable via keycodes
- ▶ Comes with open interface description for remote control commands (SCPI / VITA49)
- ▶ TDoA-ready
- ▶ Easily upgrade into a DF system



1 Gbit LAN interfaces and an optional 10 Gbit LAN interface on the receiver's rear panel for remote control and data transmission



Popular accessories

Description	Item
Digital compact receiver IF spectrum (max. 40 MHz), spectrogram (waterfall) display, plug-in power supply, SD card	R&S®EM200
Hardware option	
10 G Ethernet interface (without transceiver module)	R&S®CS-10G
Documentation	
Documentation of calibration values	R&S®CS-DCV
Software options	
Panorama scan	R&S®CS-PS
Timestamp accuracy and external GNSS	R&S®CS-TSA
Field strength measurement	R&S®CS-FS
Polychrome spectrum	R&S®CS-PC
Mapping and geotagging, includes support for map display, triangulation and geotagging	R&S®CS-MAP
Time domain measurement	R&S®CS-ZS
DF upgrade, excluding DF antennas	R&S®CS-DF
Modulation measurement	R&S®CS-MM
Spectral measurement	R&S®CS-SPM
Snapshot, record and replay	R&S®CS-IQ
Rack mount accessories	
19" adapter 1 HU 1/2, device and dummy	R&S®ZZA-KN21
19" adapter 1 HU 1/2, 2 devices side by side	R&S®ZZA-KN20



R&S®EM200 mounted with 19" adapters in variations for single or double unit installations

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