



# CMA RADIO TEST SET

## Ultimate RF testing solution



The perfect choice for

Servicing and maintaining analog and digital radios

Testing onboard aircraft equipment

Service testing of GNSS receivers

Recording and playing back proprietary signals

### Truly uncompromised in flexibility

The CMA is a radiocommunications tester for radio systems that operate in the 100 kHz to 3 GHz range. Its technology is based fully on digital signal processing and advanced computing. Intuitive operation and efficient measurement capabilities make the CMA an indispensable tool for performing radio measurements.

Key specifications	
Frequency range	100 kHz to 3 GHz
RF bandwidth	20 MHz
LMR standards	AM, FM, PM, SSB, DMR, APCO P25, dPMR, NXDN, TETRA, LTE/FirstNet, WLAN and Bluetooth® – ARB and vector analysis (R&S®VSE)
Max. input power	100 W (cont.)   150 W (1 min.)
Signal level for receiver measurements	power can be lowered to –140 dBm
Generator phase noise	–110 dBc/Hz or better at 10 kHz offset
I/Q recorder	min. sample rate = 500 Hz, up to 64 Msample
ARB generator	4 Gbyte
Avionics	ILS, VOR, MB generator, VoIP

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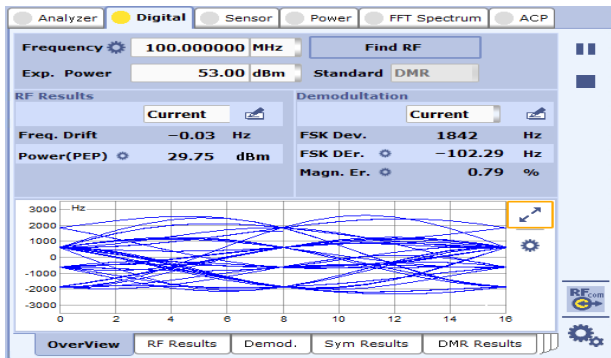
Your benefit	Features
No trade-offs	<ul style="list-style-type: none"> <li>▶ Easy and intuitive touch user interface</li> <li>▶ Analog modulation and demodulation</li> <li>▶ Up to 150 W peak input power and up to 100 W continuous input power</li> <li>▶ Integrated audio generators</li> <li>▶ Integrated sweeping spectrum analyzer, tracking generator and oscilloscope</li> <li>▶ Audio quality tests (SINAD, THD, SNR)</li> <li>▶ A-GNSS generator: GPS, GLONASS, Galileo, BeiDou</li> <li>▶ R&amp;S®CMArun – built-in sequencer tool</li> </ul>
Integrated avionics	<ul style="list-style-type: none"> <li>▶ AM communications tester</li> <li>▶ ILS/VOR and marker beacon generator</li> <li>▶ VoIP in line with EUROCAE ED-137B/C for ATC radios (generator and analyzer)</li> </ul>
Digital flexibility	<ul style="list-style-type: none"> <li>▶ I/Q recorder and ARB generator</li> <li>▶ Digital signal analysis of proprietary waveforms</li> <li>▶ Digital receiver and transmitter measurements (DMR, APCO P25, dPMR, NXDN, TETRA, LTE/FirstNet)</li> <li>▶ POCSAG and Zigbee receiver measurements</li> </ul>



For more information, visit  
[www.rohde-schwarz.com/product/CMA180](http://www.rohde-schwarz.com/product/CMA180)

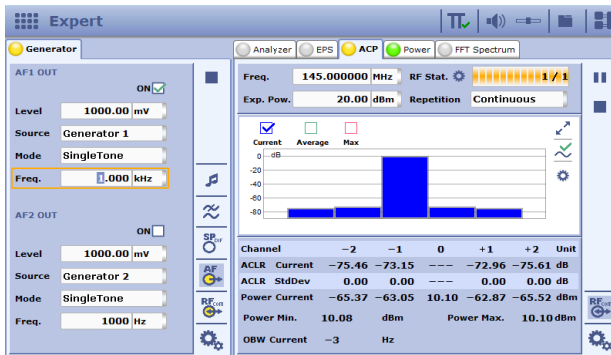
## Extensive measurement functionality

### Digital transmitter testing



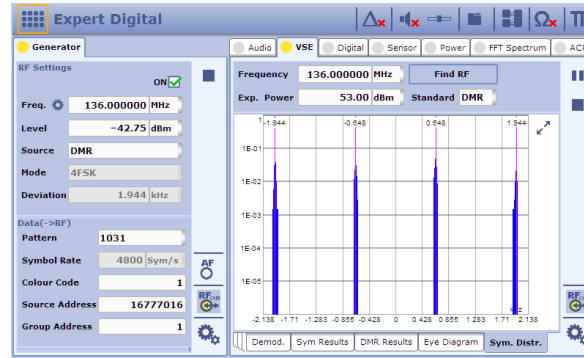
DMR transmitter testing with demodulation results, eye diagram, symbol distribution and RF results

### Adjacent channel power (ACP) and occupied bandwidth



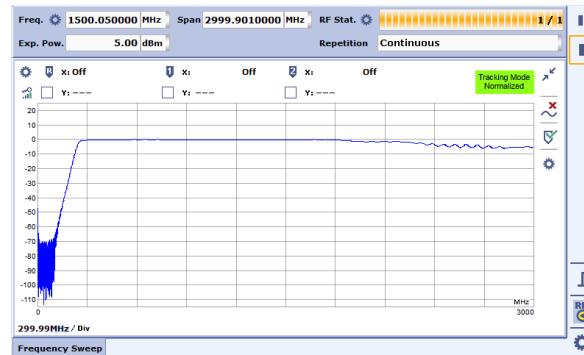
Measuring adjacent channel power and occupied bandwidth

### Digital generator for receiver tests



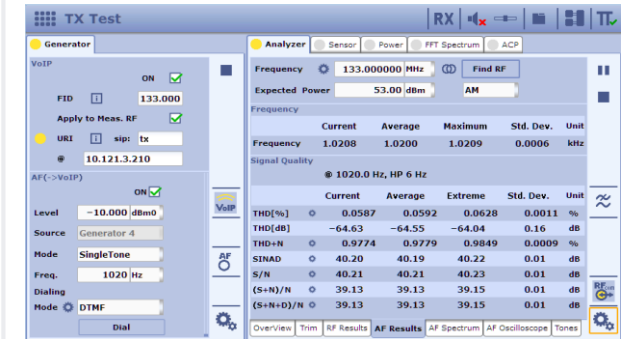
Generation of DMR signals in line with ETSI and other digital standards

### Tracking generator

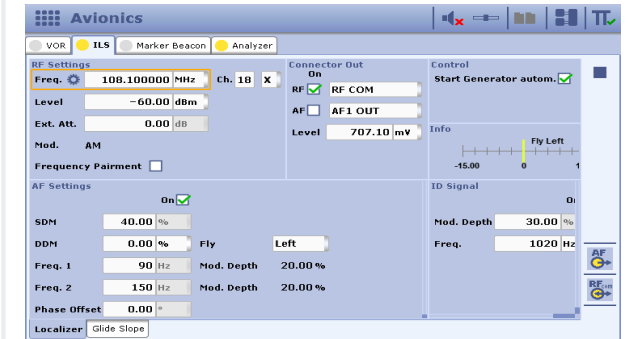


Measuring and tuning RF filters with the built-in tracking generator

## Diverse, future-ready configuration options



Integrated VoIP generator for testing air traffic controller equipment in line with ED-137B/C



Instrument landing system (ILS) features integrated into the CMA for airborne instrument testing

## Popular options

### Hardware options

Baseband generator, 4 Gbyte R&S®CMA-B110D

### Software options

Spectrum analyzer, tracking generator, oscilloscope R&S®CMA-K120

ILS/VOR generator R&S®CMA-K130

I/Q recorder R&S®CMA-K220

Signal analyzer, base R&S®CMA-K300

Signal analyzer, digital (APCO, DMR, NXDN, dPMR, TETRA) R&S®CMA-K305

Signal analyzer, LTE FDD R&S®CMA-K320

### Accessories

Transit case R&S®CMA-Z020A

Soft case R&S®CMA-Z025A

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