



# QuickTune – AUTOMATIC LMR RADIO TESTING SOLUTION

## Featuring the R&S®CMA180 / R&S®CMArun sequencer

The perfect choice for

Automatic testing and tuning of analog and digital radios

Ready-to-use solution for APCO P25, DMR, NXDN, TETRA and LTE on commonly used LMR radios



The QuickTune software solution for R&S®CMArun supports fully automatic testing and tuning of most commonly used LMR radios. LMR radios can be reliably tested, aligned and serviced by connecting the R&S®CMA180 to the radio and initiating the R&S®CMArun and QuickTune sequences. No further user interaction is required.

### Key specifications

#### R&S®CMA180 radio test set

LMR standards	AM, FM, PM, SSB, DMR, APCO P25, dPMR, NXDN, TETRA, MSK, FSK, LTE/FirstNet, WLAN and Bluetooth® – ARB and vector analysis (R&S®VSE)
Built-in search routine	Sensitivity search, squelch search, bandwidth search, switched SNR

#### R&S®CMArun sequencer

Ready-to-use solution to configure application test sequences including QuickTune for automatic LMR radio testing

Your benefit	Features
Diverse, future-ready configuration options	The R&S®CMA180 has a frequency range from 100 kHz to 3 GHz and 20 MHz bandwidth, making it ideal for testing LMR, ATC radios and avionics
Fast, precise and reliable automated testing	The Rohde & Schwarz software solution QuickTune offers service centers a fast, reproducible and precise testing solution, automatically generating and formatting reports for easy verification with the recommended tolerances to typical LMR digital standards such as APCO P25, DMR, NXDN and TETRA as well as broadband commercial communication standards such as LTE band 14
Built-in R&S®CMArun sequencer software	Intuitive operation of R&S®CMArun from the tester makes the QuickTune solution for automatic LMR testing an indispensable and easy-to-use tool for maintaining and servicing analog and digital radios



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

## Built-in R&S®CMArun sequencer software with QuickTune tests



Intuitive operation of R&S®CMArun from the R&S®CMA180 makes the QuickTune solution an indispensable and easy-to-use tool for maintaining and servicing analog and digital radios.

## R&S®CMArun sequencer software on external controller PC with QuickTune tests



The QuickTune solution can also be operated from a controller PC.

## Automatically generating and formatting reports

### Report generated on the instrument

Parameter	Result	Min	Max	Measured	Unit	Status
Frequency Error	-0.4	0.4	-0.01	ppm	Passed	
Power RMS	0	30.11	30.11	dBm	Passed	

  

Frequency	Min	Max	Measured	Unit	Status
136000000 Hz (BW: 12.5 kHz)	5.6	7.6	5.81	W	Passed

  

Frequency	Min	Max	Measured	Unit	Status
136000000 Hz (BW: 12.5 kHz)	0.7	1.3	1.03	W	Passed

  

Result	Min	Max	Measured	Unit	Status
136000000 Hz (BW: 12.5 kHz)			1.04	dBm	Passed

  

Parameter	Result	Min	Max	Measured	Unit	Status
Sensitivity Level	-119	-122.5	-119	dBm	Passed	
SINAD	12.1	12.1	12.1	dB	Passed	

### Report generated on external controller PC with QuickTune tests

Parameter	Result	Min	Max	Measured	Unit	Status
Frequency Error	-0.4	0.4	-0.02	ppm	Passed	
Power RMS	0	30.16	30.16	dBm	Passed	

  

Frequency	Min	Max	Measured	Unit	Status
136000000 Hz (BW: 12.5 kHz)	5.6	7.6	6.08	W	Passed

  

Frequency	Min	Max	Measured	Unit	Status
136000000 Hz (BW: 12.5 kHz)	0.7	1.3	1.04	W	Passed

Typical QuickTune tests sequence for automatic testing and tuning of analog and digital LMR radios.

Ordering information	
Description	Item
R&S®CMA180 radio test set	R&S®CMA180
R&S®CMA180 basic assembly – 100 kHz to 3 GHz	R&S®CMA-PS182
Solid-state disk (selection)	R&S®CMA-S052P
AC power supply, 110 V to 230 V, 300 W (selection)	R&S®CMA-S054B
OCXO reference oscillator, high-performance (hardware option)	R&S®CMA-B690M
4 Gbyte baseband generator (hardware option)	R&S®CMA-B110D
IEEE bus interface (hardware option)	R&S®CMA-B612A
Serial interface cable (accessory)	R&S®CMA-Z620A
AF impedance matching unit (accessory)	R&S®CMA-Z600A
Signal analyzer (SA), tracking generator (TG), oscilloscope (scope) (software option)	R&S®CMA-K120
Signal analyzer, base (software option)	R&S®CMA-K300
Signal analyzer, digital (software option)	R&S®CMA-K305
Signal analyzer, LTE FDD (software option)	R&S®CMA-K320
R&S®CMArun sequencer software tool, base (option)	R&S®CMA-KT051
R&S®CMArun sequencer software tool – L3Harris QuickTune (option)	R&S®CMA-KTHAR