

ROHDE & SCHWARZ

CMD55

The Rohde & Schwarz CMD55 is a digital radiocommunication test set designed specifically for testing GSM mobile stations. It supports multi-band operations covering GSM900, DCS1800, and PCS1900 networks, enabling comprehensive transmitter, receiver, and signaling measurements in development, production, and service environments.

SPECIFICATIONS

General

Interfaces	GPIB (IEEE-488.2), RS-232-C (9-pin), Centronics printer port
Display	Monochrome backlit graphics LCD

Physical

Power Supply	100 V to 240 V AC ($\pm 10\%$), 50/60 Hz
Operating Temperature	5 °C to 45 °C °C
Dimensions (W×H×D)	435 mm × 165 mm × 460 mm mm
Weight	14 kg kg

Protocol & Cellular Signaling Options

Supported Cellular Standards	GSM 900 (including E-GSM), DCS 1800, PCS 1900
Testing Capabilities	GSM Phase 1 and Phase 2 mobile station tests
Call Processing & Signaling Simulation	Call setup, call release, call clearing, handover (channel, band, power level)
Receiver Sensitivity Measurements	Bit Error Rate (BER), Residual BER (RBER), Fast BER

RF Signal Generator (Transmitter Source)

Modulation Format	GMSK (Gaussian Minimum Shift Keying)
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General RF System Specifications

RF Input/Output Port	N-type (female), 50 Ω (RF IN/OUT)
Internal Reference Frequency	10 MHz

Interfaces & Connectivity

Reference Frequency Input/Output Connectors	BNC (female)
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Physical, Environmental & Power

Power Consumption	approx. 120 W
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RF Generator

RF Generator Frequency Range (GSM 900)	925 MHz to 960 MHz
RF Generator Frequency Range (DCS 1800)	1805 MHz to 1880 MHz
RF Generator Frequency Range (PCS 1900)	1930 MHz to 1990 MHz
RF Generator Output Level (RF1)	-33 dBm to -120 dBm
RF Generator Output Level (RF3 OUT)	0 dBm to -120 dBm

RF Analyzer

RF Analyzer Frequency Range (GSM 900)	880 MHz to 915 MHz
RF Analyzer Frequency Range (DCS 1800)	1710 MHz to 1785 MHz
RF Analyzer Frequency Range (PCS 1900)	1850 MHz to 1910 MHz
Maximum RF Input Power	+47 dBm (peak)

Measurements

Power Measurement Range	+10 dBm to +47 dBm
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Receiver Measurements

Phase Error Measurement Accuracy	< 1.5° RMS, < 5° peak
Frequency Error Measurement Accuracy	< 15 Hz + reference frequency error
Timing Advance Measurement Range	0 to 63 bit periods
Power Ramp Dynamic Range	> 55 dB

TECHNOLOGY

GSM / Cellular

APPLICATIONS

GSM Mobile Station Testing

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.