

KEYSIGHT TECHNOLOGIES (AGILENT HP)

E8285A

The Keysight (formerly Agilent / HP) E8285A is a high-performance CDMA/PCS mobile station test set designed for the rapid, accurate testing and manufacturing of CDMA and analog dual-mode mobile phones.

SPECIFICATIONS

General

Interfaces	GPIO (IEEE-488), RS-232 serial, Parallel (Centronics)
Display	9-inch monochrome CRT

Physical

Power Supply	100 to 240 Vac ($\pm 10\%$), 48 to 440 Hz, 350 VA maximum
Operating Temperature	0 to 55 °C °C
Dimensions (W×H×D)	426 mm × 177 mm × 574 mm mm
Weight	20.4 kg kg

Radio Standards

Supported Standards	Cellular CDMA, PCS CDMA, Cellular AMPS, NAMPS, TACS, NTACS, JTACS
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CDMA Call Processing

CDMA Protocol Stacks	IS-95, IS-95A, TSB-74, ARIB-T53, Korean PCS, J-STD-008, TIA/EIA-95B, Multi-mode
AWGN Generator	Built-in for calibrated Eb/Nt receiver testing
Call Setup	One-button over-the-air call setup
Specialized Testing	CDMA Authentication testing, CDMA SMS (Short Message Service) testing
Base Station Emulation	Flexible emulation of both mobile and base station initiated call connect and disconnect

CDMA Measurements

Graphical Measurements	Gated power and open loop response
Measurement Concurrency	Simultaneous receiver and transmitter measurements

RF Architecture

Attenuator Type	Electronic attenuator
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RF Generator

RF Signal Generator Frequency Coverage	800 MHz to 1000 MHz (Cellular), 1700 MHz to 2000 MHz (PCS)
RF Generator Level Accuracy	±1.5 dB
RF Generator Frequency Resolution	1 Hz
RF Generator Output Level Range	RF IN/OUT: -127 to -10 dBm; DUPLEX OUT: -127 to -3.5 dBm
CDMA Generator Level Range	RF IN/OUT: -120 to -10.5 dBm; DUPLEX OUT: -120 to -4 dBm

RF Analyzer

RF Analyzer Frequency Coverage	800 MHz to 1000 MHz (Cellular), 1700 MHz to 2000 MHz (PCS)
Maximum Safe RF Input Power	60 W continuous, 100 W peak (up to 10 seconds per minute)
RF Analyzer Frequency Resolution	1 Hz

Software

Automated Software Compatibility	Agilent 83217A dual-mode mobile station test software
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Connectors

RF Connectors	Type-N female (RF IN/OUT)
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Reference Clock

External Reference Input Frequency	10 MHz
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Environmental

Storage Temperature	-55 to +75 °C
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CDMA Transmitter Measurements

CDMA Channel Power Range	-10 to +37 dBm
CDMA Channel Power Accuracy	±0.6 dB (+15 °C to +35 °C, levels ≥ -10 dBm)
CDMA Waveform Quality (Rho) Measurement Range	0.900 to 1.000
CDMA Waveform Quality (Rho) Measurement Accuracy	±0.003
CDMA Frequency Error Accuracy	±10 Hz + reference frequency accuracy
CDMA Time Offset Measurement Range	±10 µs
CDMA Time Offset Measurement Accuracy	±100 ns

Audio Generator

Audio Generator Frequency Range	dc to 25 kHz
Audio Generator Output Level Range	0.1 mV to 4 Vrms

Audio Analyzer

Audio Analyzer Frequency Range	20 Hz to 400 kHz
Audio Analyzer Frequency Accuracy	±0.02%
SINAD Measurement Range	1 to 46 dB
SINAD Measurement Accuracy	±1 dB
Distortion Measurement Accuracy	±1 dB

FM Generator

FM Deviation Range (Generator)	0 to 100 kHz
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TECHNOLOGY

CDMA / Analog Cellular Test

APPLICATIONS

Mobile Station Manufacturing and Design Verification

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