

KEYSIGHT TECHNOLOGIES (AGILENT HP)

E7495B

The Keysight (formerly Agilent) E7495B is a rugged, portable base station test set designed for installing, maintaining, and troubleshooting wireless base stations. Operating from 375 MHz to 2.5 GHz, the E7495B combines a spectrum analyzer, antenna and cable tester, signal generator, and power meter into a single battery-powered unit, making it ideal for field use in cellular networks.

SPECIFICATIONS

General

Interfaces	LAN (10/100 Base-T), USB 1.1 Host, RS-232 Serial, PCMCIA (Type II)
Display	6.5-inch (16.5 cm) color transfective TFT LCD, 640 x 480 resolution

Physical

Power Supply	AC Adapter: 100 to 240 VAC, 50 to 60 Hz; DC Input: 11 to 20 VDC; Dual internal rechargeable Li-Ion batteries
Operating Temperature	0 to 50 °C °C
Dimensions (W×H×D)	310 mm × 244 mm × 114 mm mm
Weight	4.1 kg (with single battery) kg

RF and Signal Generation

RF Generator Frequency Range	375 MHz to 2.7 GHz
RF Generator Output Power Range	-10 to -90 dBm
RF Generator Output Power Resolution	1 dB
Supported Modulation Types (Analog)	CW

RF and Signal Analysis

RF Analyzer Frequency Range	375 MHz to 2.7 GHz
RF Analyzer Frequency Resolution	1 Hz
RF Analyzer Maximum Safe Input Power	+20 dBm (100 mW)
Resolution Bandwidth (RBW) Range	100 Hz to 1 MHz
Displayed Average Noise Level (DANL)	<-135 dBm (typical, 100 Hz RBW with preamp)
Power Meter Frequency Range	375 MHz to 2.7 GHz (Internal)
Supported External Power Sensors	Keysight U2000 series (USB), Agilent 8480 series (with Option 012)

Cable and Antenna Analyzer

SWR/RL Frequency Range	375 MHz to 2.7 GHz
SWR/RL Resolution	75 kHz
Distance to Fault (DTF) Range	Up to 1524 m (5000 ft)

Reference and Timebase

Internal Reference Frequency	10 MHz
Reference Frequency Temperature Stability	±0.05 ppm
Frequency Accuracy (GPS Locked)	±1 × 10 ⁻¹¹
GPS Receiver	Internal, standard

Physical Interfaces and Connections

GPS Antenna Connector	SMA female, 3.3V active
RF IN Connector Type	Type-N female, 50 Ω
RF OUT / SWR Connector Type	Type-N female, 50 Ω
External Reference Input	BNC female, 10 MHz
External Trigger Input	BNC female

Telecom and Transmission Testing

T1 Physical Line Interface	RJ-48C (Option 100)
T1 Line Coding Formats	AMI, B8ZS (Option 100)
T1 Framing Formats	SF (D4), ESF (Option 100)

Software and Automation

Internal Operating System	Windows CE
Remote Control Protocols	FTP, SCPI over LAN
Result Export Formats	.csv, .png (screen capture)

Power Requirements

External DC Input	11 to 20 VDC
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Environmental and Compliance

Storage Temperature Range	-40 to +70 °C
Relative Humidity Range	95% R.H. at 40 °C (non-condensing)

Measurement Options

cdmaOne/cdma2000 Analyzer Option	Option 200
1xEV-DO Analyzer Option	Option 210
W-CDMA Analyzer Option	Option 500
GSM/GPRS/EDGE Analyzer Option	Option 600
Interference Analyzer Option	Option 700

SWR/RL Measurements

Corrected Directivity (SWR/RL)	> 42 dB
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RF Generator

RF Generator Output Impedance	50 Ω
RF Generator Frequency Resolution	1 Hz

RF Analyzer

RF Analyzer Input Impedance	50 Ω
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Options

E1 Analyzer Option	Option 120
cdmaOne/cdma2000 Over-the-Air (OTA) Option	Option 205
1xEV-DO Over-the-Air (OTA) Option	Option 215

E1 Analyzer

E1 Line Impedance	75 Ω (unbalanced) / 120 Ω (balanced)
E1 Transmitter Frequency	2.048 MHz

GPS

GPS Receiver Channels	12 channels
GPS Lock Time	< 3 minutes (warm start), < 15 minutes (cold start)

Environmental

Ruggedness Standard	MIL-PRF-28800F Class 2
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Spectrum Analyzer

Spectrum Analyzer Video Bandwidth (VBW)	30 Hz to 1 MHz (in 1-3-10 sequence)
Audio Demodulation	AM, FM (via internal speaker or headphone jack)

SWR / Return Loss

SWR Measurement Range	1.00 to 65.00
Return Loss Measurement Range	0 to 60 dB

Frequency Reference

External Reference Input Frequencies	10 MHz, 13 MHz, 15 MHz, 19.2 MHz
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Storage & Interface

CompactFlash Card Slot	1 x Type I/II slot
PCMCIA Card Slot	1 x Type II slot

TECHNOLOGY

Wireless Base Station Field Testing

APPLICATIONS

Installation and Maintenance of Cellular Networks

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