

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8720ET

The Keysight Agilent 8720ET is a transmission/reflection (T/R) vector network analyzer designed for the cost-effective characterization of RF and microwave components from 50 MHz to 20 GHz. It integrates a synthesized source, a T/R test set, and a tuned receiver in a single compact unit, providing magnitude and phase measurements in the forward direction alongside comprehensive vector accuracy enhancements.

SPECIFICATIONS

General

Interfaces	GPIB, Parallel
Display	7.5-inch Color LCD

Physical

Power Supply	90 to 132 VAC / 198 to 264 VAC, 47 to 66 Hz
Operating Temperature	0 to 55 °C °C
Dimensions (W×H×D)	425 mm × 222 mm × 457 mm mm
Weight	25 kg kg

Frequency and Amplitude Performance

Frequency Range	50 MHz to 20 GHz
Frequency Resolution	1 Hz

Vector Network Analysis Features

Dynamic Range	Up to 104 dB
Test Set Type	Integrated Transmission/Reflection (T/R) test set
Vector Accuracy Enhancement	One-port, response, and enhanced response calibrations

Measurement Capabilities and Signal Processing

Measurement Channels	2 channels
Display Channels	4 channels
Internal Automation	Test-sequencing capability
Pass/Fail Testing	Supported (Limit testing and markers)
Time-Domain Analysis Option	Optional (Option 010)

Bandwidth and Sweep Characteristics

Sweep Types	Frequency and power sweeps
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Inputs, Outputs and Interfaces

RF Input Impedance	50 Ω
RF Test Port Connectors	3.5 mm (Precision)

Measurement Capabilities

Number of Measurement Points	3 to 1601 points per sweep (selectable)
Selectable IF Bandwidths	10 Hz, 30 Hz, 100 Hz, 300 Hz, 1 kHz, 3 kHz, 6 kHz
Measurement Formats	Log magnitude, Phase, Group delay, Smith chart, Polar, Linear magnitude, SWR, Real, Imaginary
Averaging Factor	1 to 999
Magnitude Scale Resolution	0.001 to 100 dB/div
Phase Scale Resolution	0.01 to 360 °/div
Group Delay Scale Resolution	0.1 ps/div to 1000 s/div
Reference Level Range (Magnitude)	±500 dB
Reference Level Range (Phase)	±500°
Calibration Types Supported	Response, Response & Isolation, 1-Port, Enhanced Response

Source

Source Power Resolution	0.05 dB
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Storage

Internal Storage	Built-in 3.5-inch floppy disk drive (supports 1.44 MB MS-DOS and LIF formats)
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Source Specifications

Source Frequency Accuracy (Standard)	±10 ppm
Source Frequency Accuracy (with Option 1D5)	±0.05 ppm

Sweep Specifications

Sweep Trigger Modes	Continuous, Single, Group, Hold, External
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TECHNOLOGY

Vector Network Analysis

APPLICATIONS

RF and Microwave Component Characterization

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