KEYSIGHT TECHNOLOGIES (AGILENT HP)

E5063A

The Keysight E5063A is a 2-port Vector Network Analyzer (VNA) from the ENA series, designed to provide basic, reliable, and cost-effective RF network measurements up to 18 GHz. It offers a balance of measurement performance and utility, featuring options for various frequency ranges to suit specific testing needs, including standard S-parameter measurements and specialized options for PCB manufacturing (such as Time Domain/Test Wizard).

SPECIFICATIONS

General

Display	10.4-inch TFT color LCD touch screen, XGA (1024 x 768)

Physical

Power Supply	100 to 240 VAC, 50/60 Hz
Operating Temperature	5 to 40 °C

Basic Specifications

Frequency Range	100 kHz to 500 MHz / 1.5 / 3 / 4.5 / 8.5 / 18 GHz (option dependent)
Number of Test Ports	2
Test Port Impedance	50 Ω
Test Port Connector Type	Type-N (female)

System Performance

System Dynamic Range	117 dB (spec), 122 dB (typical)
Data Points per Sweep	2 to 10,001
Sweep Types	Linear frequency, Log frequency, Segment sweep, Power sweep
IF Bandwidth Range	10 Hz to 300 kHz

Measurement Capabilities & Analysis

Measured Parameters	S11, S21, S12, S22
Calibration Methods	Response, Response & Match, 1-port, 2-port
ECal Support	Yes
Fixture Simulator Functions	Port matching, embedding, de-embedding, impedance conversion
Time Domain Analysis	Optional (Option 011 Time Domain / Test Wizard)

Test Port Output (Source)

Output Power Range	-20 dBm to 0 dBm

Power

Maximum Power Consumption	120 W

Configuration Options

Frequency Option 245	100 kHz to 4.5 GHz
Frequency Option 285	100 kHz to 8.5 GHz
Frequency Option 2D5	100 kHz to 18 GHz
Wireless Power Transfer Analysis	Supported (Requires Option 006)

Inputs & Outputs

External Trigger Input	BNC (female), TTL level

Measurement

Trigger Sources	Internal, External, Manual, Bus
Limit Testing	Supported (with Pass/Fail display)

TECHNOLOGY

Vector Network Analyzer

APPLICATIONS

RF Component Test, Antenna Measurement, PCB Time Domain Analysis