

## KEYSIGHT TECHNOLOGIES (AGILENT HP)

# 8719D

The Keysight Agilent HP 8719D is a high-performance microwave vector network analyzer designed for fast, accurate, and comprehensive S-parameter characterization of active and passive components. Operating over a frequency range of 50 MHz to 13.5 GHz, the 8719D features an integrated synthesized source, solid-state switching S-parameter test set, and vector receiver. An upgraded processor ensures measurement speed and data transfers are up to seven times faster than previous generations.

## SPECIFICATIONS

### Physical

|        |          |
|--------|----------|
| Weight | 25 kg kg |
|--------|----------|

### Source Specifications

|                      |                    |
|----------------------|--------------------|
| Frequency Range      | 50 MHz to 13.5 GHz |
| Frequency Resolution | 1 Hz               |

### Receiver Specifications

|                          |                    |
|--------------------------|--------------------|
| Receiver Frequency Range | 50 MHz to 13.5 GHz |
|--------------------------|--------------------|

### Test Port Characteristics

|                          |             |
|--------------------------|-------------|
| Test Port Connector Type | 3.5 mm male |
| Test Port Impedance      | 50 $\Omega$ |

### Measurement Capabilities & Formats

|                        |                                                                                    |
|------------------------|------------------------------------------------------------------------------------|
| Measurement Parameters | S11, S21, S12, S22                                                                 |
| Display Formats        | Log/Linear Magnitude, Phase, Group Delay, Smith Chart, Polar, SWR, Real, Imaginary |
| Sweep Types            | Linear Frequency, Log Frequency, List Frequency, Power Sweep                       |

### Display & User Interface

|                        |                                                           |
|------------------------|-----------------------------------------------------------|
| Limit Lines Capability | Upper/lower limits, flat, sloped, and single-point limits |
|------------------------|-----------------------------------------------------------|

### Rear Panel Interfaces & Connectivity

|                        |                |
|------------------------|----------------|
| External Trigger Input | TTL-compatible |
| VGA Video Output       | 15-pin D-sub   |

### Storage & File Management

|                       |                            |
|-----------------------|----------------------------|
| Internal Storage Type | 3.5-inch floppy disk drive |
| Internal Disk Formats | LIF, MS-DOS                |

### Environmental & Reliability

|                   |        |
|-------------------|--------|
| Calibration Cycle | 1 year |
|-------------------|--------|

**Factory Options & Configurations**

|            |                                      |
|------------|--------------------------------------|
| Option 010 | Time-Domain Analysis                 |
| Option 1D5 | High-Stability Frequency Reference   |
| Option 012 | Direct Access Receiver Configuration |

**Display Reference Level**

|                                      |          |
|--------------------------------------|----------|
| Magnitude Reference Level Range      | ±500 dB  |
| Magnitude Reference Level Resolution | 0.001 dB |
| Phase Reference Level Resolution     | 0.01°    |

**Instrument Options**

|            |                                                                                         |
|------------|-----------------------------------------------------------------------------------------|
| Option 085 | High-power analyzer (adds attenuators and mechanical switch, supports up to 20 W input) |
| Option 089 | Frequency offset mode (for mixer measurements)                                          |
| Option 400 | Four-sampler receiver (adds reference sampler for TRL/LRM calibration)                  |

**Rear Panel Connections**

|                       |                                                            |
|-----------------------|------------------------------------------------------------|
| Test Port Bias Inputs | Two rear-panel BNC female connectors, 40 V, 500 mA maximum |
| Limit Test Output     | BNC female, TTL output (high = pass, low = fail)           |
| Keyboard Connector    | Mini-DIN connector for external keyboard                   |

**Environmental**

|                    |                                                        |
|--------------------|--------------------------------------------------------|
| Operating Humidity | 5% to 95% relative humidity (non-condensing) at +40 °C |
|--------------------|--------------------------------------------------------|

**Standards Compliance**

|                |                                                    |
|----------------|----------------------------------------------------|
| EMC Compliance | Complies with CISPR 11 Group 1 Class A, EN 50082-1 |
|----------------|----------------------------------------------------|

**TECHNOLOGY**

Vector Network Analyzer

**APPLICATIONS**

Microwave component testing, S-parameter measurement, time-domain analysis, group delay 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.