



# 8515A S-Parameter Test Set, 45 MHz to 26.5 GHz, 3.5 mm

## Data Sheet

**Frequency Range:** 0.045 to 26.5 GHz

**Test Ports (port 1 or 2)**

Nominal Operating Power Level:

-5 to -25 dBm

Connector Type: 3.5 mm, male

Impedance, DC Bias: 50 ohm nominal, 500 mA, 40 Vdc maximum

**Attenuation Range (incident signal)**

0 to 90 dB, in 10 dB steps

**RF Input Connector (rear panel)**

Max Input Power: +14 dBm

Connector Type: 3.5 mm, female

Dynamic Range (for transmission measurements)

Frequency Range GHz

.045 to 2 2 to 8 8 to 20 20 to 26.5

Maximum Power (dBm)

Measured at Port 2: +2 +3 +3 -1

Reference Power (dBm)

at Port 1 (nominal): -5 -9 -14 -25

Minimum Power (dBm)

Measured at Port 2: -101 -102 -101 -99

Receiver

Dynamic Range (dB): 103 105 104 100

System

Dynamic Range (dB): 96 93 87 74

**Measurement Port Characteristics**

Frequency Range (GHz)

.045 to 2 2 to 8 8 to 20 20 to 26.5

**Residual (dB)**

Directivity: 48 50 50 50

Source match: 40 50 50 50

Load match: 48 50 50 50

Reflection Tracking:  $\pm 0.003$   $\pm 0$   $\pm 0$   $\pm 0$

Transmission Tracking:  $\pm 0.009$   $\pm 0.004$   $\pm 0.009$   $\pm 0.01$

Crosstalk: 117 114 108 95

**Raw (typical) (dB) (before calibration/error correction)**

Directivity: 24 24 28 27

Source Match: 23 23 16 14

Load Match: 23 23 16 14