

KEYSIGHT TECHNOLOGIES (AGILENT HP)

85082A

The Keysight (formerly Agilent / HP) 85082A is a 50 Ohm input module designed for the HP 8508A Vector Voltmeter. Operating over a frequency range of 300 kHz to 2 GHz, it features two Type-N female input connectors, providing precise RF vector amplitude and phase measurements in 50-ohm coaxial systems.

SPECIFICATIONS

General

Interfaces	None (requires HP 8508A mainframe)
Display	None (uses HP 8508A mainframe display)

Physical

Power Supply	Powered by HP 8508A mainframe
Operating Temperature	0 to 55 °C °C

Frequency and Channel Configuration

Frequency Range	300 kHz to 2.0 GHz
Number of Channels	2 (Channel A and Channel B)
Reference Channel A Phase-Lock Range (300 kHz to 3 MHz)	-45 dBm to +16 dBm
Reference Channel A Phase-Lock Range (3 MHz to 2.0 GHz)	-50 dBm to +16 dBm

RF Input Characteristics

Input Impedance	50 Ω nominal
Input Connector Type	Type-N (female)
Maximum Operating Input Level	+16 dBm
Maximum Safe RF Input Power	+24 dBm
Maximum Safe DC Input Voltage	± 15 V
Input VSWR (300 kHz to 300 MHz)	< 1.15
Input VSWR (300 MHz to 1.0 GHz)	< 1.25
Input VSWR (1.0 GHz to 2.0 GHz)	< 1.40

Amplitude Measurement Performance

Measurement Channel B Range (300 kHz to 3 MHz)	-75 dBm to +16 dBm
Measurement Channel B Range (3 MHz to 2.0 GHz)	-80 dBm to +16 dBm
Crosstalk (300 kHz to 100 MHz)	> 100 dB
Crosstalk (100 MHz to 1.0 GHz)	> 80 dB
Crosstalk (1.0 GHz to 2.0 GHz)	> 70 dB
Amplitude Resolution	0.01 dB

Phase Measurement Performance

Phase Resolution	0.1 degrees
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System Integration

Compatible Mainframe	HP 8508A
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Measurement Accuracy

Magnitude Dynamic Accuracy (300 kHz to 100 MHz, 0 to -50 dBm)	±0.2 dB
Magnitude Dynamic Accuracy (100 MHz to 1.0 GHz, 0 to -50 dBm)	±0.4 dB
Magnitude Dynamic Accuracy (1.0 GHz to 2.0 GHz, 0 to -50 dBm)	±0.8 dB
Phase Dynamic Accuracy (300 kHz to 100 MHz, 0 to -50 dBm)	±1.0°
Phase Dynamic Accuracy (100 MHz to 1.0 GHz, 0 to -50 dBm)	±2.0°
Phase Dynamic Accuracy (1.0 GHz to 2.0 GHz, 0 to -50 dBm)	±4.0°

Environmental

Storage Temperature Range	-40 °C to +75 °C
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TECHNOLOGY

Vector Voltmeter Input Module

APPLICATIONS

RF Vector Amplitude and Phase Measurements

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