

Table 1-1. HP Model 11975A Specifications (1 of 2)


NOTE																	
<p>Values shown in brackets are typical or nominal. They are not specifications; they are included only as information useful in the application of the instrument.</p> <p>Values shown in italics are for Option 001.</p>																	
<p>FREQUENCY</p> <p>Range: 2.0 to 8.0 GHz in one band</p> <p>OUTPUT</p> <p>Harmonic (2nd and 3rd) Distortion: >20 dB below fundamental for power output of $\leq +16$ dBm</p> <p>Non-Harmonic Distortion: [typically >60 dB below fundamental for power output of $\leq +16$ dBm]</p> <p>Third Order Intercept (ALC off): [typically +25 dBm]</p> <p>1 dB Compression (ALC off): [typically +18 dBm]</p> <p>Noise Figure: [typically 13 dB]</p> <p>Power Range: +6 dBm to +16 dBm, controlled by single-turn knob with 11 calibrated divisions in 1 dB steps</p> <p>Absolute Power Accuracy: ± 2.0 dB [typically ± 1.5 dB]</p> <p>Frequency Response: ± 1.0 dB [typically ± 0.5 dB]</p> <p>Uncalibrated Power Range: [typically +16.75 dBm to +19 dBm]</p> <p>Reverse Isolation: [typically >40 dB for +16 dBm output]</p> <p>SWR (ALC on): 1.7:1 SWR (ALC off): [typically 2.5:1]</p> <p>Connector: (Std.) SMA female [50 ohms nominal] <i>(Option 001) Type N female, 50 ohms nominal</i></p>	<p>INPUT</p> <p>Minimum Power (i.e., minimum required for leveled output):</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Frequency</th> <th>Power</th> </tr> </thead> <tbody> <tr> <td>2.0 to 4.5 GHz</td> <td>+2 dBm</td> </tr> <tr> <td>4.5 to 6.1 GHz</td> <td>+5 dBm</td> </tr> <tr> <td>6.1 to 8.0 GHz</td> <td>+8 dBm</td> </tr> </tbody> </table> <p>Small Signal Gain (i.e., gain with less than minimum input required for leveled output, with ALC off):</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Frequency</th> <th>Gain</th> </tr> </thead> <tbody> <tr> <td>2.0 to 4.5 GHz</td> <td>15 dB</td> </tr> <tr> <td>4.5 to 6.1 GHz</td> <td>11 dB</td> </tr> <tr> <td>6.1 to 8.0 GHz</td> <td>9 dB</td> </tr> </tbody> </table> <div style="text-align: center; margin: 20px 0;">  <p>CAUTION</p> </div> <p>Maximum amplification of input occurs with ALC switch set to OFF. Whether ALC switch is OFF or ON, always measure output power level before connecting HP 11975A to sensitive external equipment.</p> <p>Connector: (Std.) SMA female [50 ohms nominal] <i>(Option 001) Type N female, 50 ohms nominal</i></p> <p>SWR (ALC off): [typically 2.7:1]</p> <p>Maximum Input: Power: +30 dBm (1 watt) Voltage: ± 35 Vdc</p>	Frequency	Power	2.0 to 4.5 GHz	+2 dBm	4.5 to 6.1 GHz	+5 dBm	6.1 to 8.0 GHz	+8 dBm	Frequency	Gain	2.0 to 4.5 GHz	15 dB	4.5 to 6.1 GHz	11 dB	6.1 to 8.0 GHz	9 dB
Frequency	Power																
2.0 to 4.5 GHz	+2 dBm																
4.5 to 6.1 GHz	+5 dBm																
6.1 to 8.0 GHz	+8 dBm																
Frequency	Gain																
2.0 to 4.5 GHz	15 dB																
4.5 to 6.1 GHz	11 dB																
6.1 to 8.0 GHz	9 dB																

Table 1-1. HP Model 11975A Specifications (2 of 2)

DIODE BIAS OUTPUT

Current Range: [typically 0 to ± 10 mA for single diode load] Controlled with five-turn potentiometer

Bias Control Resolution: 10 μ A

Connector: BNC female

Maximum Voltage: [typically ± 3 Vdc]

Short Circuit Protection: typically ≤ 11 mA at 25°C]

GENERAL

AC Power Requirement: 100, 120, 220, or 240 volts + 5% -10%; 48 to 440 Hz; less than 36 VA

Environmental: Per MIL-T-28800C, type III, Class 5, Style E

Temperature Range:

Operating: 0° to 55°C

Stored: -40° to 75°C

EMI: Conducted and radiated interferences are in compliance with methods CEO3 and REO2 of MIL STD 461A and CISPR Publication 11 (1975)

WEIGHT

Net: 3.04 kg (6.8 lbs)

Shipping: 5.45 kg (12.2 lbs)

DIMENSIONS

