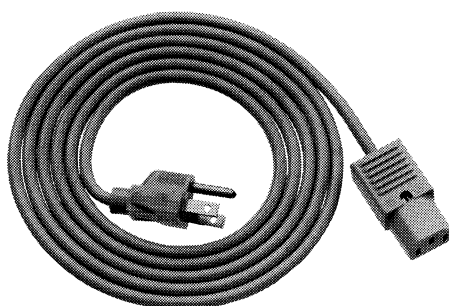


11975A

LINE POWER CABLE
(See Table 2-2 for HP Part Number)

Figure 1-1. HP Model 11975A Amplifier with Accessories Supplied

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

NOTE

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.

Values shown in italics are for Option 001.

FREQUENCY

Range: 2.0 to 8.0 GHz in one band.

OUTPUT

Harmonic (2nd and 3rd) Distortion: >20 dB below fundamental for power output of $\leq +16$ dBm.

Non-Harmonic Distortion: [typically >60 dB below fundamental for power output of $\leq +16$ dBm.]

Third Order Intercept (ALC off): [typically $+25$ dBm]

1 dB Compression (ALC off): [typically $+18$ dBm]

Noise Figure: [typically 13 dB]

Power Range: $+6$ dBm to $+16$ dBm, controlled by single-turn knob with 11 calibrated divisions in 1 dB steps.

Absolute Power Accuracy: ± 2.0 dB, [typically ± 1.5 dB]

Frequency Response: ± 1.0 dB, [typically ± 0.5 dB]

Uncalibrated Power Range: [typically $+16.75$ dBm to $+19$ dBm]

Reverse Isolation: [typically >40 dB for $+16$ dBm output]

SWR (ALC on): 1.7:1

SWR (ALC off): [typically 2.5:1]

Connector: (Std.) SMA female, [50 ohms nominal]
(Option 001) Type N female, 50 ohms nominal

INPUT

Minimum Power (i.e., minimum required for leveled output):

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

Small Signal Gain (i.e., gain with less than minimum input required for leveled output, or with ALC off):

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

CAUTION

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.

Connector: (Std.) SMA female, [50 ohms nominal]
(Option 001) Type N female, 50 ohms nominal

SWR (ALC off): [typically 2.7:1]

Maximum Input:

Power: $+30$ dBm (1 watt)

Voltage: ± 35 Vdc

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 ≤ 10 mA]

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)

GENERAL

AC Power Requirement: 100, 120, 220, or 240 volts +5 percent -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 degrees C

Stored: -40 to $+75$ degrees C

Dimensions: