

Model 11664A

Table 1-1. Specifications

**SPECIFICATIONS**

**FREQUENCY**

Frequency Range: 10 MHz to 18 GHz

**REFLECTION**

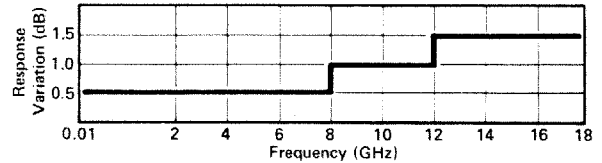
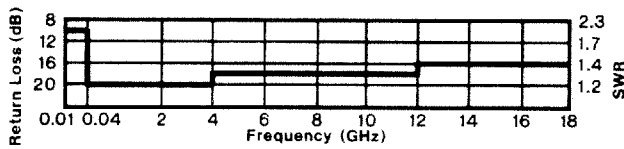
Return Loss (15 - 35° C):

- 10 MHz to 40 MHz: ≥10 dB (≤1.92 SWR)
- 40 MHz to 4 GHz: ≥20 dB (≤1.22 SWR)
- 4 GHz to 12 GHz: ≥18 dB (≤1.29 SWR)
- 12 GHz to 18 GHz: ≥16 dB (≤1.38 SWR)

**TRACKING BETWEEN TWO HP 11664A DETECTORS**

Tracking between two HP 11664A Detectors: Specified at same relative power level. Does not include mismatch or coupler uncertainties.

- 10 MHz to 8 GHz: <0.5 dB
- 8 GHz to 12 GHz: <1.0 dB
- 12 GHz to 18 GHz: <1.5 dB



**GENERAL**

Input Power Range: +10 to -50 dBm

Temperature Range: Operation: 0° to 55°C (32° to 131°F);  
Storage: -40° to 75°C (-40° to 167°F)

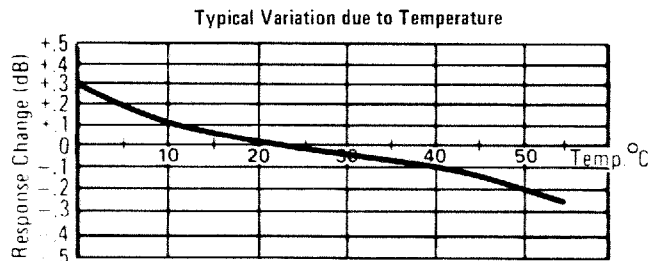
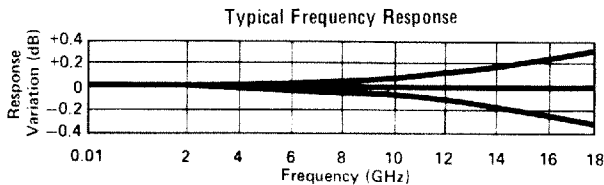
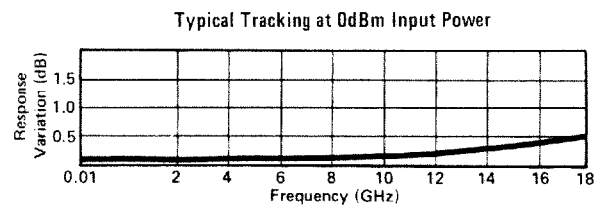
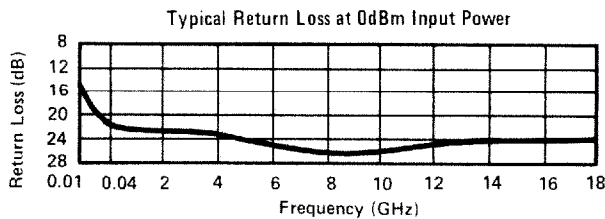
Input Impedance: 50 ohms nominal

Connectors: Standard: Type N male  
Option 001: APC-7®  
Special Order: Type N Female

Dimensions: Cable length is 1.2 metres (4 feet)

Weight: Net 0.17 kg (6 oz.)

Table 1-2. Supplemental Characteristics



**GENERAL**

Input Damage Level:  
+ 20 dBm (100 mW) RF power 10 Vdc

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Table 1-3. Recommended Test Equipment

Instrument Type	Critical Specification	Suggested Model
Sweep Oscillator	Frequency: 10 MHz to 18 GHz	HP 8350B mainframe with HP 83592A/B/C RF plug-in or HP 86222A/B RF plug-in and HP 86290A/B/C RF plug-in and HP 11869A adapter or HP 8620C mainframe with: HP 86222A/B RF plug-in and HP 86290A/B RF plug-in
Network Analyzer	Provides 27.8 kHz modulation signal. Powers 3 HP 11664A detectors. Processes/displays detected signals.	HP 8756A or HP 8755C with HP 182T/HP 180 series display mainframe.
Directional Bridge	Frequency: 10 MHz to 18 GHz	HP 85021A (APC-7®) HP 85021C (Type-N Female)
Detector	Frequency: 10 MHz to 18 GHz	HP 11664A
Power Splitter	Frequency: 10 MHz to 18 GHz	HP 11667A
Coaxial Short	Type-N Male	HP 11512A
Open	Type-N Male	HP Part Number 85032-60001
Calibrated Open/Short	APC-7®	HP Part Number 85021-60001
Adapters (2)	Type-N (m) to Type-N (m)	HP Part Number 1250-0778
Open-end Wrench	Thin 1/2 x 9/16	HP Part Number 8710-0877