Peak Power Sensors

Specifications		
Frequency Range 84812A:	500 MHz to 18 GHz	
Frequency Range 84813A:	500 MHz to 26.5 GHz	
Frequency Range 84814A:	500 MHz to 40 GHz	
Frequency Range 84815A:	50 MHz to 18 GHz [*] (typical, 20 MHz to 18 GHz)	
Dynamic Range:	-32 to $+20$ dBm (Usable to -40 dBm.)	
Sensor Calibration	< 4 GHz: ±3.6%	
RSS Uncertainty:	$< 12 \text{ GHz: } \pm 3.9\%$	
-	< 18 GHz: ±4.3%	
	<26.5 GHz: ±5.6%	
	< 40 GHz: ±6.7%	
Input SWR, max	84812A/13A/14A	
(Reflection Coefficient):	500 MHz to 18 GHz: 1.25 (0.11)	
	18 GHz to 26.5 GHz: 1.35 (0.15)	
	26.5 GHz to 40 GHz: 1.60 (0.23)	
	84815A	
	20 MHz to 50 MHz: 1.2 (0.09), typical	
	50 MHz to 6 GHz: 1.20 (0.09)	
	6 GHz to 18 GHz: 1.30 (0.13)	
Rise/Falltime:	Specifications for sensors are found in the HP 899X	
,	Operating Manual.	
Maximum Power Input:	1 W peak power for 1 μ s, not to exceed 200 mW (CW)	
Operating Temperature:	0°C to +55°C	
* Below 50 MHz the carrier feedthrough starts to be noticeable due to decreasing video		
filtering. This effect can be eliminated by averaging except for the statistical functions (PDF		
and CDF) as used with the HP 8992A.		

Table 2-1. Peak Power Sensors Specifications

Peak Power Sensors

HP 84812/13/14/15A

General Characteristics	
Acoustic Noise Emissions:	No Fan Installed
Geraeuschemission:	Kein Ventilator Eingebaut
Connector HP 84812A/15A:	Type-N Male
Connector HP 84813A:	APC-3.5 mm Male
Connector HP 84814A:	2.4 mm Male
Sensor Cable Length:	1.5 M (5 ft)
Option 001:	6.1 M (20 ft)
Calibration Interval:	18 months
Parameters Corrected for:	Frequency, Temperature, and Power Non-linearity.
Dimensions HP 84812A/15A:	27mm H, 37mm W, 137mm L (1.05" x 1.45" x 5.4")
Dimensions HP 84813A:	27mm H, 37mm W, 127mm L (1.05" x 1.45" x 5.0")
Dimensions HP 84814A:	27mm H, 37mm W, 127mm L (1.05" x 1.45" x 5.0")
Weight:	Net: 0.35 kg (0.8 lb); Shipping: 1 kg (2 lb)
Option 001:	Net: 0.8 kg (1.5 lb); Shipping: 1.5 kg (3 lb)

Peak Power Sensors Specifications (continued)