

**HP 8480 Series Specifications**  
**25 Watt Sensors 1 mW to 25 W (0 to +44 dBm)**

HP model	Frequency range	Maximum SWR	Power linearity	Maximum power <sup>1</sup>	Connector type	Weight
8481B	10 MHz to 18 GHz	10 MHz to 2 GHz: 1.10 2 to 12.4 GHz: 1.18 12.4 to 18 GHz: 1.28	+35 to +44 dBm ± 4%	0-35° C: 30W avg 35-55° C: 25W avg 0.01-5.8 GHz: 500W pk 5.8-18 GHz: 125W pk 500W·μs per pulse	Type-N(m)	Net 0.8 kg (1.75 lb) Shipping 1.5 kg (3.25 lb)
8482B	100 kHz to 4.2 GHz	100 kHz to 2 GHz: 1.10 2 to 4.2 GHz: 1.18			Type-N(m)	

**3 Watt Sensors 100 μW to 3 W (-10 to +35 dBm)**

8481H	10 MHz to 18 GHz	10 MHz to 8 GHz: 1.20 8 to 12.4 GHz: 1.25 12.4 to 18 GHz: 1.30	+25 to +35 dBm ± 5%	3.5W avg, 100W pk 100W·μs per pulse	Type-N(m)	Net 0.2 kg (0.38 lb) Shipping 0.5 kg (1 lb)
8482H	100 kHz to 4.2 GHz	100 kHz to 4.2 GHz: 1.20			Type-N(m)	

**100 mW Sensors 1 μW to 100 mW (-30 to +20 dBm)**

8485A	50 MHz to 26.5 GHz	50 to 100 MHz: 1.15 100 MHz to 2 GHz: 1.10 2 to 2.4 GHz: 1.15 12.4 to 18 GHz: 1.20 18 to 26.5 GHz: 1.25	+10 to +20 dBm +2, -4%	300 mW avg, 15W pk 30W·μs per pulse	APC-3.5mm (m)	Net 0.2 kg (0.38 lb) Shipping 0.5 kg (1 lb)
Opt 033	50 MHz to 33 GHz	26.5 to 33 GHz: 1.40				
8481A	10 MHz to 18 GHz	10 to 30 MHz: 1.40 30 to 50 MHz: 1.18 50 MHz to 2 GHz: 1.10 2 to 12.4 GHz: 1.18 12.4 to 18 GHz: 1.28			Type-N(m)	
8482A	100 kHz to 4.2 GHz	100 to 300 kHz: 1.60 0.3 to 1 MHz: 1.20 1 MHz to 2 GHz: 1.10 2 to 4.2 GHz: 1.30			Type-N(m)	
8483A (75 Ω)	100 kHz to 2 GHz	100 to 600 kHz: 1.80 600kHz to 2 GHz: 1.18		300 mW avg, 10W pk	Type-N(m) 75 Ω	
R8486A	26.5 to 40 GHz	1.4	+10 to +20 dBm +2, -4%	300 mW avg, 15W pk 30W·μs per pulse	Waveguide Flange UG-599/U	Net 0.26 kg (0.53 lb) Shipping 0.66 kg (1.3 lb)
Q8486A	33 to 50 GHz	1.5			Waveguide Flange UG-383/U	
W8486A	75 to 110 GHz	1.08	+1, -3%	200 mW avg 40 W peak	Waveguide Flange UG-387/U	Net 0.4 kg (0.9 lb) Shipping 1.0 kg (2.1 lb)
8487A	50 MHz to 50 GHz	50 to 100 MHz: 1.15 100 MHz to 2 GHz: 1.10 2 to 12.4 GHz: 1.15 12.4 to 18 GHz: 1.20 18 to 26.5 GHz: 1.25 26.5 to 40 GHz: 1.30 40 to 50 GHz: 1.50	+10 to +20 dBm +2, -4%	300mW avg, 15W pk 30W·μs per pulse	2.4 mm (m)	Net 0.14 kg (0.28 lb) Shipping 0.5 kg (1 lb)

**High Sensitivity Sensors 100 pW to 10 μW (-70 to -20 dBm)**

8481D <sup>1*</sup>	10 MHz to 18 GHz	10 to 30 MHz: 1.40 30 MHz to 4 GHz: 1.15 4 to 10 GHz: 1.20 10 to 15 GHz: 1.30 15 to 18 GHz: 1.35	-30 to -20 dBm ± 1%	100 mW avg 100 mW pk	Type-N(m)	Net 0.18 kg (0.41 lb.) Shipping 0.9 kg (2 lb)
8485D <sup>2</sup>	50 MHz to 26.5 GHz	0.05 to 0.1 GHz: 1.19 0.1 to 4 GHz: 1.15 4 to 12 GHz: 1.19 12 to 18 GHz: 1.25 18 to 26.5 GHz: 1.29	-30 to -20 dBm ± 2%	100 mW avg 100 mW pk	APC-3.5 mm (m)	Net 0.2 kg (0.38 lb) Shipping 0.5 kg (1 lb)
Opt. 033	50 MHz to 33 GHz	26.5 to 33 GHz: 1.35				
8487D <sup>3</sup>	50 MHz to 50 GHz	0.05 to 0.1 GHz: 1.19 0.1 to 2 GHz: 1.15 2 to 12.4 GHz: 1.20 12.4 to 18 GHz: 1.29 18 to 34 GHz: 1.37 34 to 40 GHz: 1.61 40 to 50 GHz: 1.89	-30 to -20 dBm ± 2%	100 mW avg 100 mW pk	2.4 mm (m)	Net 0.2 kg (0.38 lb) Shipping 0.5 kg (1 lb)
R8486D <sup>3</sup>	26.5 to 40 GHz	1.4	-30 dB to -25 dBm ± 3%	100 mW avg or pk 40 Vdc max	Waveguide Flange UG-599/U	Net 0.26 kg (0.53 lb) Shipping 0.66 kg (1.3 lb)
Q8486D <sup>3</sup>	33 to 50 GHz	1.4	-25 dB to -5 dBm ± 5%		Waveguide Flange UG-383/U	

<sup>1</sup> Negligible deviation except for those power ranges noted.

<sup>2</sup> For pulses greater than 30 W the maximum average power (P<sub>avg</sub>) is limited by the energy per pulse (E) in W·μs according to P<sub>avg</sub> = 30·0.02E.

<sup>3</sup> Includes HP 11708A 30 dB attenuator for calibrating against a 0 dBm, 50 MHz power reference. HP 11708A is factory set to 30 dB ± 0.05 dB at 50 MHz, traceable to NIST. SWR < 1.05 at 50 MHz.

\* This sensor directly replaces the popular HP 8484A power sensor.