

# Specifications and Supplemental Characteristics

Table 1-1 lists detector specifications, when used with an HP 8711B/C, HP 8712B/C, HP 8713B/C, HP 8714B/C analyzer, which are the warranted performance standards or limits against which you can test the device.

Table 1-2 lists supplemental (typical, non-warranted) detector characteristics, when used with one of the above-mentioned analyzers.

Table 1-1. HP 86200B/86201B RF Detector Specifications

Specifications describe the instrument's warranted performance over the temperature range of 25 ±5°C.

<b>Connector:</b>		Type-N m
<b>Frequency Range:</b>		10 MHz to 3.0 GHz
<b>Nominal Impedance:</b>		
HP 86200B:		50Ω
HP 86201B:		75Ω
<b>Return Loss:</b>		
10 MHz to 1.3 GHz:		≥ 22 dB
1.3 MHz to 3.0 GHz:		≥ 18dB
<b>Frequency Response:</b> <sup>1</sup>		
10 MHz to 3 GHz:		±0.5 dB at 0 dBm
<b>Absolute Power Accuracy for the HP 86200B</b>  30 MHz :		
<b>Power</b> <b>(dBm)</b>	<b>Accuracy</b> <b>(±dB)</b>	
+ 16	±1.55	
+ 10	±1.50	
−30	± 1.50	
−40	± 2.00	
−50	±3.00	
<b>Absolute Power Accuracy for the HP 86201B</b>  30 MHz :		
<b>Power</b> <b>(dBm)</b>	<b>Accuracy</b> <b>(±dB)</b>	
+ 16	±1.55	
+ 10	±1.50	
−30	±1.50	
−40	± 2.00	
−47	±2.70	

<sup>1</sup> This specification for the HP 86201B is typical above 2.0 GHz.

**Table 1-2. Supplemental Characteristics**

<b>Cable Length:</b>	2.0 m [6.56 in.]
<b>Weight</b> (Including cable):	
Net:	0.34 kg [0.75 lb]
Shipping:	0.57 kg [1.25 lb]
<b>AM Delay Dynamic Accuracy:</b> <b>Normalized at 10 dBm</b>	
Power Deviation from Normalization	
0 dB to 10 dB	$\pm 10$ ns
10 dB to 20 dB	$\pm 20$ ns
<b>Recommended Power Range for AM Delay Measurement</b>	–10 dBm to +13 dBm
<b>Dynamic Range:</b>	
HP 86200B	–50 dBm to +16 dBm
HP 86201B	–47 dBm to +16 dBm
<b>RF Connector Mechanical Tolerances</b>	
HP 86200B nominal impedance:	50 $\Omega$
HP 86201B nominal impedance:	75 $\Omega$
Recession of the male center conductor from reference plane:	0.207 to 0.210 in <sup>1</sup>

<sup>1</sup> Because a Type-N gauge calibration block zeros the gauge at a 0.207 inch offset, the gauge displays a 0.207 to 0.210 inch offset as 0.000 to 0.003 inches.