

# HP 8752C Specification

## Test Port Output Characteristics

### Frequency Characteristics

<b>Range:</b>	300 kHz to 1.3 GHz
<b>Option 003:</b>	300 kHz to 3 GHz
<b>Option 006:</b>	300 kHz to 6 GHz
<b>Resolution</b>	1 Hz
<b>Stability:</b>	±7.5 ppm 0°C to 55°C
<b>Accuracy:</b>	± 10 ppm at 25°C ± 5°C

### Output Characteristics

<b>Test port power range:</b>	-20 to +5 dBm (standard)
	-85 to +10 dBm (Option 004)
	-85 to +8 dBm (Options 004 and 075)

<b>Resolution:</b>	0.05 dB
<b>Level accuracy:<sup>7,25</sup></b>	±1.0 dB
<b>Level linearity:<sup>7,25</sup></b>	(-20 to -15 dBm) ±0.5 dB
	(-15 to 0 dBm) ±0.2 dB
	(0 to +5 dBm) ±0.5 dB
<b>Option 004:</b>	(-15 to +5 dBm) ±0.2 dB
	(+5 to +10 dBm) ±0.5 dB

<b>Impedance:</b>	50Ω nominal
	75Ω nominal (Option 075)

## Test Port Input Characteristics

<b>Frequency range:</b>	300 kHz to 1.3 GHz	
<b>Option 003:</b>	300 kHz to 3 GHz	
<b>Option 006:</b>	300 kHz to 6 GHz	
<b>Noise level:</b>		
3 kHz BW	Reflection	-75 dBm (typical)
10 Hz BW	Reflection	-85 dBm (typical)
3 kHz BW	Transmission	-90 dBm
10 Hz BW	Transmission	-110 dBm

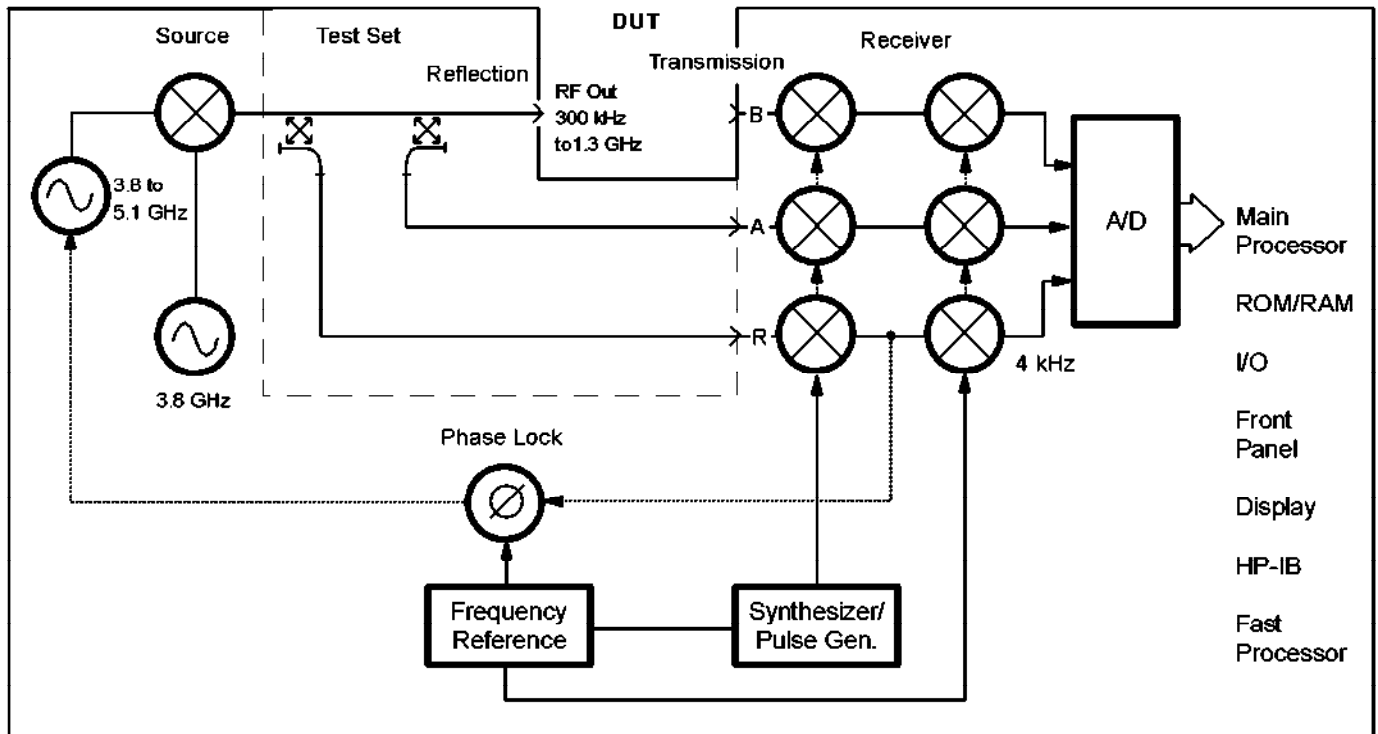
### Option 006, from 3 GHz to 6 GHz:

3 kHz BW	Transmission	-85 dBm
10 Hz BW	Transmission	-105 dBm

<b>Max. input level:</b>	0 dBm at transmission port
	10 dBm at reflection port

<b>Damage level:</b>	<b>Standard, Opt. 003, or Option 075:</b>
	20 dBm or 25 VDC at both test ports
	<b>Option 006:</b>
	20 dBm or 25 VDC at reflection port
	20 dBm or 10 VDC at transmission port

<b>Crosstalk:</b>		
(Reflection port to transmission port)	300 kHz to 1.3 GHz	100 dB
	1.3 to 3 GHz	100 dB
	3 GHz to 6 GHz	90 dB
	<b>Option 075:</b>	
	300 kHz to 1.3 GHz	100 dB
	1.3 to 3 GHz	97 dB

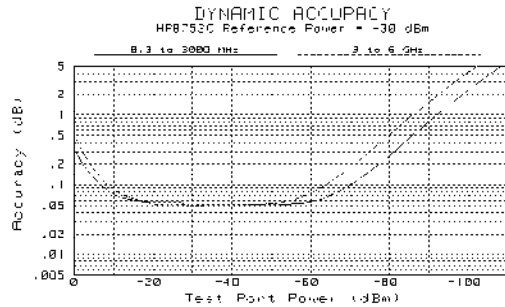


HP 8752C Block Diagram

# HP 8752C Specifications (continued)

## Magnitude Characteristics

### Dynamic Accuracy

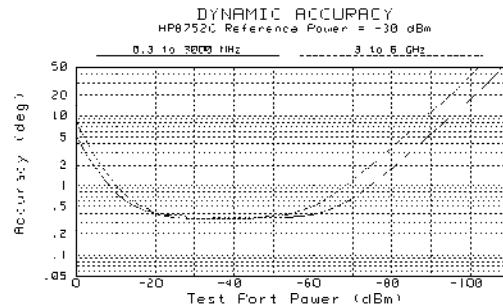


- Display resolution:** 0.001 dB/division
- Marker resolution<sup>1</sup>:** 0.001 dB
- Trace noise:** 300 kHz to 3 GHz: < 0.006 dB rms  
3 GHz to 6 GHz (Option 006): < 0.010 dB rms
- Reference level:**
  - Range:** ± 500 dB
  - Resolution:** 0.001 dB
- Stability:** 0.02 dB/°C, 300 kHz to 3 GHz (typical)  
0.04 dB/°C, 3 GHz to 6 GHz (typical)

## Phase Characteristics

Range: ±180 degrees

### Dynamic Accuracy



- Display resolution:** 0.01°/ division
- Marker resolution<sup>1</sup>:** 0.01°
- Trace noise:** 300 kHz to 3 GHz: < 0.038° rms  
3 GHz to 6 GHz (Option 006): < 0.070° rms
- Reference level:**
  - Range:** ± 500°
  - Resolution:** 0.001°
- Stability:** 0.05° /°C, 300 kHz to 3 GHz (typical)  
0.20° /°C, 3 GHz to 6 GHz (typical)