

SIGNAL GENERATORS

High-Performance RF (cont'd)

HP 8662A, 8663A, 11721A



Pulse Modulation¹

Pulse on/off ratio: >80 dB (50 to 2560 MHz)
Pulse rise/fall time: <250 ns (50 to 120 MHz); <800 ns (120 to 640 MHz); <100 ns ($f_c \geq 640$ MHz)
Pulse repetition frequency (50% duty cycle):

Internal: 10 Hz to 99.9 kHz
External: 10 Hz to 2 MHz, 50 MHz < f_c < 640 MHz; 10 Hz to 5 MHz, $f_c > 640$ MHz

Internal Modulation Oscillator

Rates: 10 Hz to 99.9 kHz
Frequency resolution: 3 digits
Frequency accuracy: Same as reference oscillator
Output level (available on rear panel): 1 V peak into 600 Ω
Output impedance: 600 Ω
Flatness (referenced to 1 kHz): < $\pm 1\%$
Distortion: < 1%

Other HP 8662A and HP 8663A Information

Remote programming: The HP-IB interface is standard on the HP 8662A and HP 8663A signal generators. All functions controlled from the front panel, with the exception of the line switch, are programmable with the same accuracy and resolution as in manual mode.

Operating temperature range: 0° to +55° C

Leakage: Meets radiated and conducted limits of MIL STD 461A methods RE02 and CE03 as well as VDE 0871

Power requirements: 115 (90 to 126) V or 230 (198 to 252) V; 48 to 66 Hz; 450 VA max

Weight: HP 8662A: net, 30 kg (65.5 lb); shipping, 36 kg (80 lb);

HP 8663A: net, 33.8 (74 lb); shipping, 40 kg (88 lb)

Size: HP 8662A: 178 mm H \times 425 mm W \times 572 mm D (7 in \times 16.75 in \times 22.5 in). HP 8663A: 178 mm H \times 425 mm W \times 642 mm D (7 in \times 16.75 in \times 25.3 in). Note: depth includes front panel depth of 45 mm (1.75 in).

Ordering Information

	Price
HP 8662A 1280 MHz Signal Generator ²	\$41,890
Opt 001 RF Connectors on Rear Panel Only	+ \$435
Opt 003 Specified SSB Phase Noise for 640 MHz Output	+ \$625
Opt 700 External MATE Translator	+ \$11,295
Opt 907 Front Handle Kit (5061-9690)	+ \$67
Opt 908 Rack Flange Kit (5061-9678)	+ \$36
Opt 909 Rack Flange Kit with Front Handles (5061-9684)	+ \$93
Opt 910 Two Sets of Operating and Service Manuals (08662-90069)	+ \$139
Opt W30 Extended Repair Service (see page 671)	+ \$900
Opt W32 Calibration Service (see page 671)	+ \$740
Opt 1BN MIL STD 45662A Calibration Certificate	+ \$200
Opt 1BP MIL STD 45662A Calibration with Data Provided	+ \$750

HP 8663A 2560 MHz Signal Generator ²	+ \$57,850
Opt 001 RF Connectors on Rear Panel Only	+ \$435
Opt 002 Wideband Linear Phase Modulation	+ \$6,300
Opt 003 Specified SSB Phase Noise for 640 MHz Output	+ \$625
Opt 700 External MATE Translator	+ \$7,830
Opt 907 Front Handle Kit (5061-9690)	+ \$67
Opt 908 Rack Flange Kit (5061-9678)	+ \$36
Opt 909 Rack Flange Kit with Front Handles (5061-9684)	+ \$93
Opt 910 Additional Operation and Calibration Manual (08663-90069) and Service Manuals (08663-90071)	+ \$360
Opt 915 Add Service Manual (08663-90071)	+ \$155
Opt W30 Extended Repair Service (see page 671)	+ \$1220
Opt W32 Calibration Service (see page 671)	+ \$860
Opt 1BN MIL STD 45662A Calibration Certificate	+ \$200
Opt 1BP MIL STD 45662A Calibration with Data Provided	+ \$800
HP 11714A Service Support Kit (required for servicing HP 8662A/8663A)	\$1,800

¹Pulse modulation is available for $f_c < 50$ MHz but is unspecified.
²HP-IB cables not supplied. For description and price, see page 615.

☎ For off-the-shelf shipment, call 800-452-4844.

HP 11721A Frequency Doubler

The HP 11721A Doubler is an ideal accessory for extending the usable frequency range of signal generators, frequency synthesizers, or other signal sources. Operating on input frequencies of 50 MHz to 1300 MHz, it provides a doubled output in the range of 100 MHz to 2300 MHz. The HP 11721A will work well with any RF source with an output in the range 50 to 1300 MHz.

The 50 Ω passive circuit of the HP 11721A offers low conversion loss, low spurious, and excellent flatness over its entire frequency range when operated above +10 dBm.

HP 11721A Specifications

Input frequency range: 50 to 1300 MHz
Output frequency range: 100 to 2600 MHz
Conversion loss (+13 dBm input, 50 to 1280 MHz): < 15 dB
Spurious referenced to desired output frequency f (+13 dBm input with harmonics < -50 dBc, 50 to 1280 MHz): $f/2$, -15 dB; $3f/2$, -15 dB
Input SWR: 1.5 typical
Input/output impedance: 50 Ω nominal
Operating temperature range: 0° to +50° C
Connectors: Input, type N male; output, type N female
Size: 161 mm L \times 30 mm W \times 20.5 mm H (6 1/4 in \times 1 1/8 in \times 3/8 in)
Weight: Net, .02 kg (0.5 lb); shipping, 0.4 kg (1 lb)

Ordering Information

HP 11721A Frequency Doubler	Price \$800
Opt W30 Extended repair service. See page 671	+ \$50