

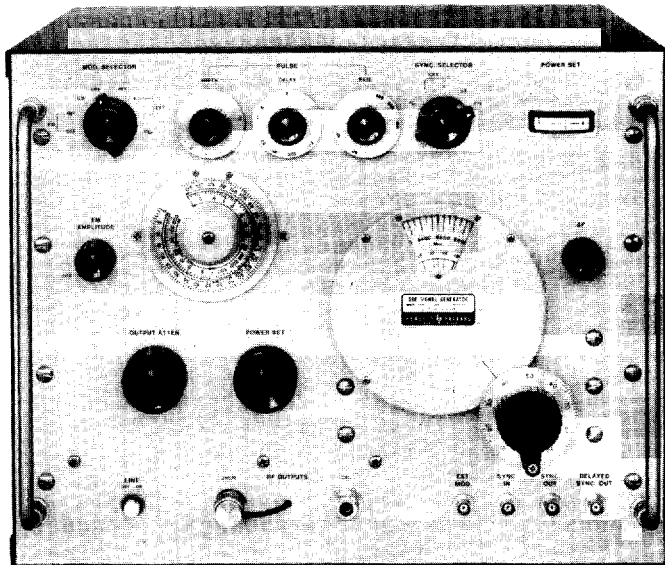


SIGNAL GENERATORS

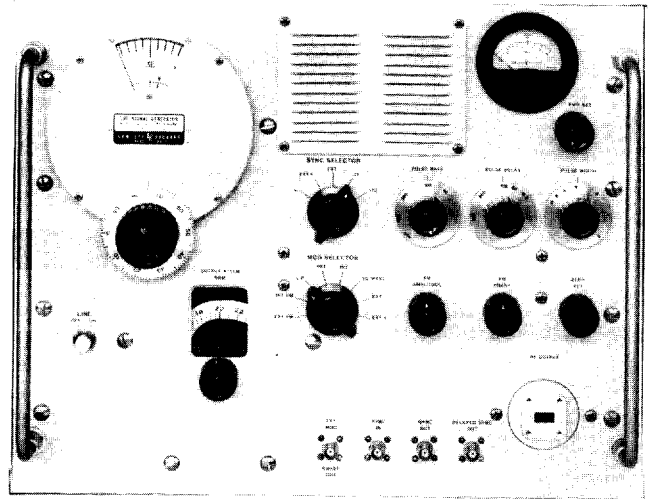
SHF Signal Generators

Models 618C, 620B, 626A, 628A

- Signal simulations, 3.8-21 GHz
- FM, Pulse modulation



618C



628A

618C, 620B, 626A, 628A SHF Signal Generators

These SHF Signal Generators cover 3.8 to 21 GHz in four bands. Carrier frequency is set and read directly on the large tuning dial. No voltage adjustment is necessary during tuning because the klystron repeller voltage is tracked with frequency changes automatically. Oscillator output is also set and read directly, and no frequency correction is necessary throughout operating range. A frequency logging scale permits frequency to be reset within 0.1%.

All offer internal pulse, squarewave and frequency modulation, plus external pulse and frequency modulation. The pulse generators may be synchronized with an external sine wave and positive or negative pulse signals.

618C, 620B Specifications

Frequency range: 618C: 3.8 to 7.6 GHz; 620B: 7 to 11 GHz.

Frequency calibration: direct reading dial; accuracy $\pm 1\%$.

Modulation: Int. pulse, squarewave, FM, plus Ext. pulse and FM. Similar to 626/28.

Output range: 0 dBm to -127 dBm (0.224 volt to 0.1 microvolt) into 50 ohms; directly calibrated in dBm and volts; type N connector.

Output accuracy: within ± 2 dB from -7 to -127 dBm, within ± 3 dB from 0 to -7 dBm, terminated in 50-ohm load.

Source impedance: 50 ohms nominal; SWR < 2.0 .

Auxiliary output: > 0.3 mW useful for phase-locking or counting.

Power: 115 or 230 volts $\pm 10\%$, 50 to 60 Hz, approximately 230 VA.

Size: cabinet, 353 H x 445 W x 518 mm D (13.9" x 17.5" x 20.4"); rack mount, 355 x 483 x 483 mm (14" x 19" x 19").

Weight: net, 31.1 kg (69 lb); shipping, 33.5 (74 lb).

626A, 628A Specifications

Frequency range: 626A, 10 to 15.5 GHz; 628A, 15 to 21 GHz.

Frequency calibration: dial direct-reading in GHz, accuracy better than $\pm 1\%$.

Output range: (10 mW to 1 pW) $+10$ dBm to -90 dBm; attenuator dial calibrated in output dBm.

Source impedance: 50 Ω nominal; SWR < 2.5 at $+10$ dBm; < 1.35 at 0 dBm and below.

Output monitor accuracy: better than ± 1 dB; temperature-compensated thermistor bridge circuit monitors RF oscillator power level.

Output connector: 626A: WR75 waveguide, flat cover flange; 628A: WR51 waveguide, flat cover flange.

Output attenuator accuracy: better than $\pm 2\%$ of attenuation in dB introduced by output attenuator.

Internal pulse modulation: repetition rate variable from 40 to 4000 pps; pulse width variable 0.5 to 10 μ s.

Internal square-wave modulation: variable 40 to 4000 Hz controlled by "pulse-rate" control.

Internal frequency modulation: power line frequency; deviation up to ± 5 MHz.

External pulse modulation: requires pulse amplitude of 15 to 70 volts peak positive or negative; width 1 to 2500 μ s.

External frequency modulation: max. deviation approx. ± 5 MHz.

Sync out signals: positive 20 to 100 V peak into 1000-ohm load; better than 1 μ s rise time; 1) simultaneous with RF pulse, positive; 2) in advance of RF pulse, positive, variable 5 to 300 μ s.

External synchronization: sine wave, 40 to 4000 Hz, 5 to 50 V rms amplitude, pulse signals, 40 to 4000 pps, 5 to 50 V amplitude, positive or negative, 0.5 to 5 μ s width, 0.1 to 1 μ s rise time.

Power: 115 or 230 volts $\pm 10\%$, 50 to 60 Hz, approx. 200 VA.

Size: cabinet, 356 H x 432 W x 381 mm D (14" x 17" x 15"); rack mount, 356 H x 483 W x 313 mm D (14" x 19" x 12.8").

Weight: net, 26.8 kg (59 lb); shipping, 29.8 kg (66 lb).

Ordering Information

618C or 620B SHF Signal Generator (cabinet mount) \$9,150

618CR or 620BR SHF Signal Generator (rack mount) \$9,150

Option 910: Extra operating and service manual add \$7.50

626A or 628A SHF Signal Generator (cabinet) \$12,800

626AR or 628AR SHF Signal Generator (rack) \$12,800

Option 910: Extra operating and service manual add \$7.50

Price