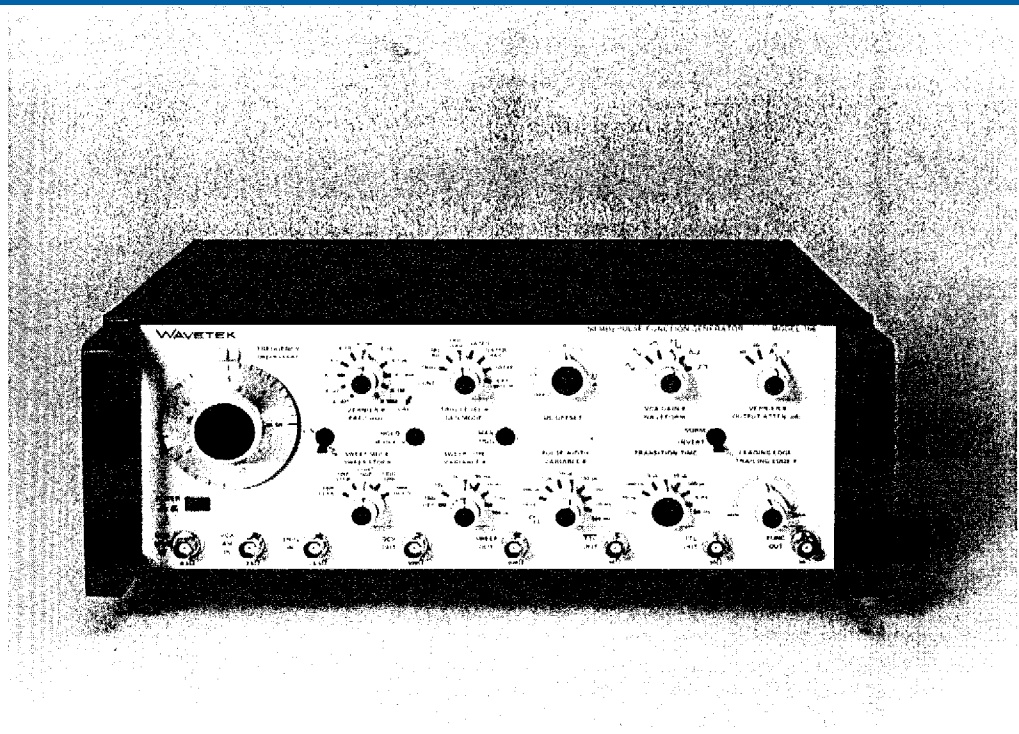

50 MHz Pulse/ Function Generator

- 0.0001 Hz to 50 MHz Range
- 30 Volt Peak-To-Peak Output
- Lin/Log Sweep Plus AM and FM
- Pulse Width and Transition Time Control
- Independent Pulse Width and Rate

SWEEP/FUNCTION GENERATOR

Selectable Waveforms: Sine, triangle, square and ramp. All can be inverted. All can be amplitude and frequency modulated.
Operational Modes: Continuous, Triggered, Double Triggered, Triggered Haverwave, Gated, Gated Haverwave, Continuous Sweep, Triggered Sweep and Sweep and Hold.
Frequency Range: 0.0001 Hz to 50 MHz in 11 ranges. Maximum sweep 1000:1 in lin or log.
Sweep Time Range: 100s to 100 μs in 6 ranges.
Function Output: Variable to 30 Vp-p (15 Vp-p into 50Ω). Voltage attenuation 0 to 80 dB: to 60 dB in 20 dB steps, plus 20 dB continuous vernier.
DC Offset: DC offset of all waveforms is adjustable to ±10V (±5V into 50Ω). Waveform plus offset is limited to ±15V (±7.5V into 50Ω).
GCV Output: 0 to +5V (nominal, open circuit).
Output Impedance: 600Ω
Sweep Output: 0 to +5V (nominal, open circuit) ramp.
Output Impedance: 600Ω.
Sweep Time: 100s to 100μs.
VCG (FM)—Voltage Controlled Generator: Up to 1000:1 frequency change with external 0 to +5V signal.
Mode: Linear or logarithmic.
Slew Rate: 2% of range per μs.
VCG Linearity: 0.0005 Hz to 50 kHz ±0.5% of range.
Voltage Controlled Amplitude (VCA): 0 to ±5V gives 0 to 30V amplitude change. AC input allows 0 to 200% modulation (suppressed carrier).
AC input Range: 5V minimum for 100%, 10V minimum for 200% AM.
Input Impedance: 4.99 to 10 kΩ, depending on gain control.
Input Bandwidth: 10 kHz.
Trigger Input
Trigger Signal: 1 Vp-p minimum.
Trigger Level: ±5V.
Input Impedance: 1.5 kΩ, 30 pF.
Maximum Repetition Rate: 25 MHz.

PULSE/FUNCTION GENERATORS
MODEL 166

FREQUENCY PRECISION

Dial Accuracy: (For ∿, ⩘, ⊓⊔ and linear dial setting of 0.5 to 5.)
±2% of full scale for 0.0005 Hz to 5 MHz.
+15%, −6% of full scale for 5 to 50 MHz.

AMPLITUDE PRECISION

Amplitude Change With Frequency
Sine and square variations:
<±0.1 dB to 100 kHz;
<±0.2 dB to 1 MHz;
<±3 dB to 50 MHz.
Step Attenuator Accuracy: ±0.3 dB to 20 dB step to 100 kHz.

WAVEFORM CHARACTERISTICS

Sine Distortion (Test at 10 Vp-p):
<0.5% for 10 Hz to 50 kHz.
All harmonics greater than:
30 dB down for 50 kHz to 5 MHz; 20 dB down for 5 to 50 MHz.
Triangle Linearity: >99% for 0.005 Hz to 100 kHz.
Square Wave Aberrations (Test at 10 Vp-p):
<5% of p-p voltage.

PULSE GENERATOR

Pulses: Variable amplitude positive or complementary pulses ⊔, ⊓. TTL and TTL pulses are simultaneous with main pulse. All pulses can drive 50Ω terminations.
Operational Modes: Continuous, Triggered, Double Triggered, Gated and Continuous Sweep.
External Width: The trigger input determines the output pulse width and period.
Pulse Period Range: Pulse period is selectable from 20 ns to 10,000s (50 MHz to 0.0001 Hz) with approximately 1% vernier.
Pulse Width: 10 ns to 100 ms in 7 ranges. Maximum duty cycle is 70% for periods to 200 ns, decreasing to 50% for 20 ns periods. Control has nominal 50% duty cycle detent.
Transition Time: 7 ns to 50 ms in 7 ranges, independently variable for leading and trailing edges.
Function Output: 0 to ±15V into open circuit (0 to ±7.5V into 50Ω). Voltage attenuation 0 to 80 dB.
TTL and TTL Pulses: Transition times less than 4 ns into 50Ω termination.

GENERAL

Stability: Amplitude, dc offset and frequency in linear mode to 500 kHz.
Short Term: ±0.05% for 10 minutes.
Long Term: ±0.25% for 24 hours.
Environment: Specifications apply at 23° ±5°C after 30 min warm-up. Operates 0° to ±50°C.
Dimensions: 36.2 cm (14¼ in.) wide; 13.3 cm (5¼ in.) high; 38.1 cm (15 in.) deep.
Weight: 8.8 kg (19.4 lb) net; 10.9 kg (24 lb) shipping.
Power: 90 to 105V, 108 to 126V, 198 to 209V and 216 to 252V; 50 to 66 Hz; 50 VA nominal.

FACTORY/FOB

San Diego, CA

PRICE

Model 166	**$2,695**