

Instek Function Generator

Part No. 01GFG8020

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GFG-8020H

FEATURES

- Frequency Range \square 0.2Hz ~ 2MHz
- Coarse and Fine tuning
- Sine, Triangle, Square, TTL pulse and CMOS Output
- Built-in 4 Digit Counter (INT only)
- Large 0.5" LED Display
- Variable DC offset control
- Output Overload protection

SPECIFICATIONS

Main Output

| | |
|--------------------------|---|
| Waveforms | Sine, Triangle, Square, TTL pulse and CMOS output |
| Amplitude | $>20\text{Vp-p}$ (open circuit) \square $>10\text{Vp-p}$ (into 50Ω load) |
| Impedance | $50\Omega \pm 10\%$ |
| Attenuator | $-20\text{dB} \pm 1.0\text{dB}$ (at 1kHz) |
| DC Offset | $<-10\text{V} \sim +10\text{V}$, ($<-5\text{V} \sim +5\text{V}$ into 50Ω load) |
| Duty Control | 1 : 1 to 10 : 1 continuously rating |
| Display | 4 digit LED display |
| Frequency Range | 0.2Hz to 2MHz (7 ranges) |
| Frequency Control | Separate coarse and fine tuning |

Sine Wave

| | |
|---------------------------|--|
| Distortion | $< 1\%$ 0.2Hz ~ 20kHz \square $< 2\%$ 20kHz ~ 200kHz |
| Frequency Response | $< 0.2\text{dB}$ 0.2Hz ~ 100kHz \square $< 1\text{dB}$ 100kHz ~ 2MHz |

Triangle Wave

| | |
|---------------|--|
| Linear | 98% 0.2Hz ~ 100kHz \square 95% 100kHz ~ 2MHz |
|---------------|--|

Square Wave

| | |
|--------------------------|--------------------|
| Symmetry | <2% 0.2Hz ~ 100kHz |
| Rise or Fall Time | < 120nS |

CMOS Output

| | |
|--------------------------|---------------------------------------|
| Level | 4Vpp±1Vpp ~ 14.5Vpp±0.5Vpp adjustable |
| Rise or Fall Time | <120nS |

TTL Output

| | |
|--------------------------|-------|
| Level | >3Vpp |
| Rise or Fall Time | <30nS |

VCF

| | |
|------------------------|---|
| Input Voltage | Approx. 0V~10V (±1V) input for 10 : 1 frequency ratio |
| Input Impedance | 10kΩ± 10% |

Frequency Counter

| | |
|-------------------|---|
| Mode | Internal only |
| Range | 0.2Hz ~ 2MHz |
| Accuracy | ±Timebase accuracy ±1 Count |
| Timebase | Oscillation frequency 3.58MHz, Temp. stability±20ppm (23°C±5°C) |
| Resolution | 0.1Hz, 1Hz, 10Hz, 100Hz, 1kHz |

Power Source

AC 100V/120V/220V/230V±10%, 50/60Hz

Accessories

Power cord × 1,
Instruction manual × 1,
[GTL-101](#) × 1

Dimensions & Weight

230(W) × 95(H) × 280(D) mm, Approx. 2.1 kg
