

SFG-2000 Specifications

The specifications apply when the SFG-2000 is powered on for at least 30 minutes under +20°C~+30°C.

| | SFG-2000 Series | SFG-2100 Series |
|-----------------------------------|--|---|
| Main | | |
| Frequency Range (Sine, Square) | SFG-2004 : 0.1Hz ~ 4MHz SFG-2010 : 0.1Hz ~ 10MHz | SFG-2110 : 0.1Hz ~ 10MHz |
| Frequency Range (Triangle) | 0.1Hz~1MHz | |
| Frequency Resolution | 0.1Hz | |
| Frequency Stability | ± 20 ppm | |
| Frequency Accuracy | ± 20 ppm | |
| Aging | ± 5 ppm /year | |
| Output Function | Sine, Square, Triangle | |
| Amplitude Range | 2mV~10Vpp(50Ω Load) | |
| Impedance | 50Ω±10% | |
| Attenuator | -20dB±1dB×2 | |
| DC Offset | < -5V ~ > +5V(50Ω Load) | |
| Duty Cycle | 20% to 80%, 2Hz~1MHz (Only Square) | |
| Range Resolution | 1% | |
| Display | 9 位 LED display | |
| SINE WAVE | | |
| Harmonics Distortion | -55dBc,0.1Hz~200kHz; -40dBc,0.2MHz~4MHz; -30dBc,4MHz~10MHz (Specification applied to both TTL/CMOS OFF and from MAX. to 1/10 level) | |
| Flatness(Relative to 1kHz) | < ± 0.3dB,0.1Hz~1MHz; < ± 0.5dB,1MHz~4MHz; < ± 2dB, 4MHz~10MHz | |
| TRIANGLE WAVE | | |
| Linearity | ≥ 98%,0.1Hz~100kHz; ≥ 95%,100kHz~1MHz | |
| SQUARE WAVE | | |
| Symmetry | ± 1% of period +4ns to 0.1Hz~100kHz | |
| Rise or Fall Time | ≤ 25ns at maximum output.(into 50 load) | |
| CMOS Output | | |
| Level | 4Vpp±1Vpp~15Vpp±1Vpp adjustable; Rise or Fall Time ≤ 120ns | |
| TTL Output | | |
| Level | ≥ 3Vpp ; Fan out; 20 TTL Load ;Rise and Fall Time ≤ 25ns | |
| SWEEP OPERATION | | |
| Rate | - | 100:1 ratio max. and adjustable (In order to get the maximum sweep span, the sweep time needs to be tuned on when adjusting the sweep span.) |
| Time | | 1Sec~30Sec adjustable (When the sweep time is too long, the stop frequency will reach and stay at the maximum frequency of the instrument until the end of the sweep cycle.) |
| Mode | | Lin./Log. switch selector |
| AMPLITUDE MODULATION | | |
| Depth & Modulation Frequency | - | 0~100% ; 400Hz(INT), DC~1MHz(EXT) |
| Carrier BW | | 100Hz~5MHz(-3dB) |
| EXT Modulation Sensitivity | | ≤ 10Vpp 100% modulation |
| FREQUENCY MODULATION | | |
| Deviation & Modulation Frequency | - | 0~±50kHz,center at 1MHz, 400Hz |

| | | |
|-------------------------------|--|--|
| | | fixed(INT), 1kHz fixed(EXT) |
| EXT Modulation Sensitivity | | $\leq 10\text{Vpp}$ 在 10% modulation (center at 1MHz) |
| FREQUENCY COUNTER | | |
| Range | | 5Hz~150MHz |
| Accuracy | | Time base accuracy ± 1 位 |
| Time base | | $\pm 20\text{ppm}(23^\circ\text{C} \pm 5^\circ\text{C})$ after 30 minutes warm up 後 |
| Resolution | | 100nHz@1Hz, 0.1Hz@100MHz |
| Input Impedance | | 1M Ω /150pf |
| Sensitivity | | $\leq 35\text{mVrms}$ (5Hz~100MHz) $\leq 45\text{mVrms}$ (100MHz~150MHz) |
| STORE/RECALL FUNCTION | | |
| | | 10 groups of panel settings |
| POWER SOURCE | | |
| | | AC115V $\pm 10\%$, AC 230V+10%/-15%, 50/60Hz |
| Accessories | | |
| | | User Manual $\times 1$ Power Cord $\times 1$ GTL-101 $\times 1$ (SFG-2000 Series) GTL-101 $\times 2$ (SFG-2110) |
| DIMENSION & WEIGHT | | 266(W) \times 107(H) \times 293(D) mm, Approx. 3.2kg |