



The GFC-8000 Series performs virtually all of the counting measurements required in laboratories, in terms of both period and frequency. A bright red 8 digit LED display with an included overflow indicator provides a clear view. Both models feature a stable time base with a maximum resolution of 100nHz and 10nS at 1Hz for frequency and period measurement, respectively. Gate time can be configured for fast response (5 digits/10ms) or accuracy (7 digits/s) for more control. For high frequency needs, the GFC-8270H can operate at up to 2.7GHz. The GFC-8000 Series feature easy operation with a simple front panel interface, suitable for both portable and bench-top use.

GFC-8270H (2.7GHz) GFC-8131H (1.3GHz)

FEATURES

- * Frequency and Period Measurement
- * High Resolution at Both High and Low Frequency
- * 0.01Hz~2.7GHz Frequency Range(GFC-8270H)
- * 0.01Hz~1.3GHz Frequency Range(GFC-8131H)
- * 10mV rms High Sensitivity
- * 100nHz Resolution for 1Hz
- * Variable Trigger Level Control
- * Microprocessor Controlled Intelligent Counter(only GFC-8270H)

GTL-101 Test Lead

BNC-Alligator Heads



GTL-110 Test Lead

BNC-BNC Heads



SPECIFICATIONS	
DISPLAY	
	8 digits with Hz, kHz, MHz, GHz, S, mS, μ S, nS and overflow
GATE TIME	
	Variable from 10ms to 10s, or 1 period of input depending on whichever is greater
ACCURACY	
	\pm (Resolution \pm timebase error)
CHANNEL A	
Range	DC coupled 0.01Hz ~ 120MHz AC coupled 30Hz ~ 120MHz
Sensitivity	10mV rms typical, 50mV rms max
Coupling	AC or DC, switchable
Filter	Low pass, switchable in or out for channel A -3dB point of nominally 100kHz
Impedance	1M //40pF
Attenuator	1/1 or 1/20dB
Trigger Level	-2.5 VDC ~ + 2.5 VDC
Adjustment	
Resolution	For frequency measurement, the maximum resolution is 100nHz for 1Hz and 0.1Hz for 100MHz inputs respectively. For period measurement, the maximum resolution is 10nS for 1Hz and 0.1×10^{-10} s for 100MHz inputs respectively. At least, the display is 7 digits for 1sec, 6 digits for 100ms, 5 digits for 10ms gate time respectively.
Period Range	8nS to 100S at least 7 digits displayed for per second of gate time
CHANNEL B	
Range	50MHz ~ 2.7GHz for GFC-8270H 50MHz ~ 1.3GHz for GFC-8131H
Sensitivity	\leq 50mVrms (10mVrms typical) for GFC-8270H \leq 40mVrms (10mVrms typical) for GFC-8131H
Coupling	AC only
TIME BASE	
Aging rate	1PPM, per Month
Temperature	5PPM $23^{\circ}\text{C} \pm 5^{\circ}\text{C}$
Line variation	0.005ppm for \pm 10% variation
POWER SOURCE	
	AC 100V/120V/220V/230V \pm 10%, 50/60Hz
DIMENSIONS & WEIGHT	
	230(W) x 95(H) x 280(D)mm, Approx. 2.2kg

ORDERING INFORMATION

GFC-8131H 1.3GHz Intelligent Counter
GFC-8270H 2.7GHz Intelligent Counter

ACCESSORIES :

User manual x 1 , Power cord x 1 , GTL-110 x 1 , GTL-101 x 1