



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
Impedance	-3dB point of nominally 100kHz
Attenuator	1M $\parallel$ 40pF
Trigger Level	1/1 or 1/20dB
Adjustment	-2.5 VDC ~ + 2.5 VDC
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 0.1x10 ⁻¹² 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°C $\pm$ 5°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