



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

The GFC-8000 Series performs virtually all of the counting measurements required in laboratories, in terms of both period and frequency. 8 digits LED display with distinctive red color and overflow indicator provides fast and clear view. Model 8270H/8131H add extra sensitivity into the GHz range: ultra-stable timebase with 100nS for 1Hz resolution, 7 digits/sec of responding time for instant update, and variable trigger level control. Easy operation with all functions neatly organized on the front panel, compact size suitable for both portable and bench-top usage, GFC-8000 Series serves users as a handy reference.

## 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	
<b>DISPLAY</b>	
	8 digits with Hz, kHz, MHz, GHz, S, mS, $\mu$ S, nS and overflow
<b>GATE TIME</b>	
	Variable from 10ms to 10s, or 1 period of input depending on whichever is greater
<b>ACCURACY</b>	
	$\pm$ (Resolution $\pm$ timebase error)
<b>CHANNEL A</b>	
<b>Range</b>	DC coupled 0.01Hz ~ 120MHz AC coupled 30Hz ~ 120MHz
<b>Sensitivity</b>	10mV rms typical, 50mV rms max
<b>Coupling</b>	AC or DC, switchable
<b>Filter</b>	Low pass, switchable in or out for channel A -3dB point of nominally 100kHz
<b>Impedance</b>	1M //40pF
<b>Attenuator</b>	1/1 or 1/20dB
<b>Trigger Level Adjustment</b>	-2.5 VDC ~ + 2.5 VDC
<b>Resolution</b>	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 <sup>-11</sup> 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.
<b>Period Range</b>	8nS to 100S at least 7 digits displayed for per second of gate time
<b>CHANNEL B</b>	
<b>Range</b>	50MHz ~ 2.7GHz for GFC-8270H 50MHz ~ 1.3GHz for GFC-8131H
<b>Sensitivity</b>	$\leq$ 50mVrms (10mVrms typical) for GFC-8270H $\leq$ 40mVrms (10mVrms typical) for GFC-8131H
<b>Coupling</b>	AC only
<b>TIME BASE</b>	
<b>Aging rate</b>	1PPM, per Month
<b>Temperature</b>	5PPM 23°C $\pm$ 5°C
<b>Line variation</b>	0.005ppm for $\pm$ 10% variation
<b>POWER SOURCE</b>	
	AC 100V/120V/220V/230V $\pm$ 10%, 50/60Hz
<b>DIMENSIONS &amp; WEIGHT</b>	
	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