

Intelligent Counter



GFC-8270H(2.7GHz)

- * Frequency, Period Measurement
- * Microprocessor Controlled Intelligent Counter
- * High Resolution at Both High and Low Frequency
- * 0.01Hz ~ 2.7GHz Frequency Range
- * 10mV rms High Sensitivity
- * 100nHz Resolution for 1Hz
- * Self Diagnosis Routine
- * Variable Trigger Level Control
- * Display Hold Function

GFC-8131H(1.3GHz)

- * Frequency and Period Measurement
- * High Resolution at Both High and Low Frequency
- * 0.01Hz ~ 1.3GHz Frequency Range
- * 10mV rms High Sensitivity
- * 100nHz Resolution for 1Hz
- * Variable Trigger Level Control
- * Display Hold Function

SPECIFICATIONS	
DISPLAY	8 digits with Hz, kHz, MHz, GHz, S, mS, mS, nS and overflow
GATE TIME	Variable from 10ms to 10s, or 1 period of input 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	1MW//40pF
Attenuator	20dB
Trigger Level	-2.5 VDC to + 2.5 VDC
Adjustment	
Resolution	The maximum resolution is 100nHz for 1Hz and 0.1Hz for 100MHz inputs respectively for frequency measurement and 100nS for 1Hz and 10^{-15} S for 100MHz inputs respectively for period measurement At least 7,6,5 digits are displayed for 1 sec, 100mS, 10mS gate time respectively
Period Range	8nS to 100S at least 7 digits displayed for per second of gate time
CHANNEL B	
Range	50MHz to 2.7GHz
Sensitivity	\leq 50mVrms (10mVrms typical)
Coupling	AC only
TIME BASE	
Aging rate	1PPM, per Month
Temperature	5PPM $23^{\circ}\text{C} \pm 5^{\circ}\text{C}$
Line variation	\pm 0.005PPM for \pm 10% variation
POWER SOURCE	AC 100V/120V/ 220V/240V \pm 10%, 50/60Hz
ACCESSORIES	Power cord x 1, Instruction Manual x 1 GTL-110 x 1, GTL-101 x 1
DIMENSIONS & WEIGHT	230(W) x 95(H) x 280(D)mm, Approx. 2.2kg

SPECIFICATIONS	
DISPLAY	8 digits with Hz, kHz, MHz, GHz, S, mS, mS, 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	1MW//40pF
Attenuator	20dB
Trigger Level	-2.5 VDC to + 2.5 VDC
Adjustment	
Resolution	The maximum resolution is 100nHz for 1Hz and 0.1Hz for 100MHz inputs respectively for frequency measurement and 10nS for 1Hz and 0.1×10^{-15} S for 100MHz inputs respectively for period measurement At least 7,6,5 digits are displayed for 1 sec, 100mS, 10mS gate time respectively
Period Range	8nS to 100S at least 7 digits displayed for per second of gate time
CHANNEL B	
Range	50MHz to 1.3GHz
Sensitivity	\leq 40mVrms (10mVrms typical)
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 in line voltage
POWER SOURCE	AC 100V/120V/220V/230V \pm 10%, 50/60Hz
ACCESSORIES	Power cord x 1, Instruction Manual x 1 GTL-110 x 1, GTL-101 x 1
DIMENSIONS & WEIGHT	230(W) x 95(H) x 280(D)mm, Approx. 2.2kg

G1

ISO-9001 & ISO-14001