

# 3.0GHz Frequency Counter

## 8030



### ◆ FEATURE

- Frequency measuring range ; 0.1 Hz to 100 MHz in A input  
80 MHz to 3.0 GHz in C input
- Period and Total measurement for input A
- RPM measurement for input A
- 9 Digit display with 0.01 mHz resolution in 1 Sec (With external reference signal)
- RS-232C serial interface function for communicating with computer
- High sensitivity External reference input function( $\geq 1.5$  Vrms)
- Reciprocal technique for high resolution at low counting frequencies
- Self check function executed to perform a automatic self diagnosis of various counter function
- Push-scanning for selecting Function and Gate time
- Low-pass filter(100 kHz, -3 dB) installed for removing noise signal in low frequency measuring
- AC/DC coupling function ( Selectable AC/DC Coupling )
- 10:1 Input Attenuation ( Selectable x1/x10 Attenuator )
- Data hold function

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## ◆ Technical Specification of 8030 Frequency Counter

Function		Specification				
Display		9 digit large green LED display , Overflow , Gate time, mHz, Hz kHz, MHz, nS, uS, mS, S, HOLD				
Frequency Measurement	Range	0.1Hz to 3.0GHz (A: 0.1Hz - 100MHz, C: 80MHz – 3.0GHz)				
	Gate Time	0.01Sec, 0.1 Sec, 1 Sec, 10 Sec				
	Resolution	1 nHz to 10 Hz				
	Accuracy	+/- Resolution +/- Timebase Error +/- 1 Count				
Input Characteristics	Terminal	A, C				
	Sensitivity	A Input: 30mVrms, C Input: 25mVrms(80MHz-150MHz), 20mVrms(150MHz-2.0GHz) 40mVrms(2.0GHz-3.0GHz)				
	Impedance	A Input: 1 Mohm, Less than 40pF, C Input: 50 ohm Input coupling: A; AC or DC (switch selectable), C; AC				
	Max. Input Voltage	A Input: 250Vrms, C Input: 3Vrms				
	Attenuator	A Input: x1, x10				
	Low Pass Filter	A Input: 100 kHz, -3dB				
Multi Function for Input A	Period	Range: 10nSec to 10Sec Resolution: 1pSec to 1nSec depending on gate time and Input signal Accuracy: +/- Resolution +/- Trigger error +/- 1 count				
	Totalize	Range: DC to 30 MHz Count capacity: 0 to 999999999(Max.)				
	RPM	6 RPM to 600 x 10 <sup>7</sup> RPM				
Timebase Characteristics	Internal Timebase	Frequency: 10MHz TCO(TCXO; option) Aging Rate: Less than 5 x 10 <sup>-6</sup> /month Temp. Stability: Less than 5 x 10 <sup>-6</sup> (0 °C to +50 °C) Line Voltage: Less than 1 x 10 <sup>-6</sup> for 10% variation				
	Frequency Standard Output	Frequency: 10 MHz Amplitude: 1.5 Vp-p Impedance: Approx. 600 ohm				
	External Standard Input	Frequency: 10 MHz Amplitude: 1.5 Vrms to 5 Vrms Impedance: Approx. 600 ohm				
General	Power Requirement	230 VAC +/- 10%, 48 to 66Hz				
	Operating Temperature	0 to 50 °C (Accuracy specified at 25 +/- 5 °C)				
	Dimension	240(W) x 270(D) x 90(H) mm				
	Weight	Approx. 2.5 kg				
	Standard Accessories	Power Cord, BNC to BNC cable, Fuse, Instruction Manual				
	Optional Accessories	RS-232C Software, RS-232C Cable				
Packing Details		Q'ty	Size(mm)	N.W.(kg)	G.W.(kg)	Remark
	Inner Packing	1	305(W)x330(D)x165(H)		2.5	
	Carton Packing	4	355(W)x645(D)x360(H)	10.0	11.0	

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