

3GHz FREQUENCY COUNTER

FC-8300



■ FEATURE

- Frequency measuring range : 0.1 Hz to 100 MHz in A input
80 MHz to 3.7 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. (By Ext. Reference Signal)
- RS-232C serial interface function for communicating with computer
- High sensitivity External reference input function(Higher than 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

■ Technical Specification

Function		Specification				
Display		9 digit large green LED display, Overflow, Gate time, mHz, Hz, kHz, MHz, nS, uS, mS, S, HOLD				
Frequency Measurement	Range	Input A:0.1Hz - 100MHz, Input C: 80MHz – 3.7GHz				
	Gate Time	0.01Sec, 0.1Sec, 1Sec, 10Sec				
	Resolution	1nHz to 10Hz				
	Accuracy	$\pm$ Resolution $\pm$ Timebase Error $\pm$ 1count				
Input Characteristics	Terminal	A , C				
	Sensitivity	A Input : 30mVrms , C input : 10mVrms(80MHz-2.0GHz), 20mVrms(2.0GHz-3.0GHz) 30mVrms(3.0GHz-3.2GHz), 40mVrms(3.2GHz-3.5GHz) 70mVrms(3.5GHz-3.7GHz)				
	Impedance	A Input : 1 M Ω , 40pF, C input : 50 Ω				
	Max. Input Voltage	A Input : 250mVrms, C input : 3Vrms				
	Attenuator	A Input : x1, x10				
	Low Pass Filter	A Input : 100kHz, -3dB				
Multi Function for input A	Period	Range : 10mSec to 10Sec				
		Resolution : 1pSec to 1nSec depending on Gate time and input Signal				
		Accuracy : $\pm$ Resolution $\pm$ Trigger Error $\pm$ 1count				
	Totalize	Range : 5Hz to 10MHz				
		Count capacity : 0 to 999999999(Max)				
	RPM	6 RPM to 900 x 10 ⁶ RPM				
Time Base Characteristics	Internal Timebase	Frequency : 10MHz TCO (TCXO ; Option)				
		Aging Rate : Less than 5x10 ⁻⁶ /month				
		Temp. Stability : Less than 5 x10 ⁻⁶ (0 to +50°C)				
		Line Voltage : Less than 1x10 ⁻⁶ for 10% variation				
	Frequency Standard Output	Frequency : 10MHz				
		Amplitude : 1.5Vp-p				
		Impedance ; Approx. 600 ohm				
	External Standard Input	Frequency : 10MHz				
		Input Level : 1.5Vrms to 5Vrms				
		Impedance ; Approx. 600 ohm				
General	Power Requirement	115 or 230VAC +/- 10% ,48 to 66Hz				
	Operating Temperature	0 to 50°C (Accuracy specified at 25 $\pm$ 5°C)				
	Dimension	240(W) x 270(D) x 90(H)mm				
	Weight	Approx. 2.5 kg				
	Standard Accessories	Power cord,BNC cable, Fuse, Instruction manual				
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	11.5	