

FREQUENCY COUNTER



FC-8150



FC-8300

Features

- Frequency measuring range

MODEL	FREQUENCY INPUT A	FREQUENCY INPUT C
FC-8150	0.1Hz - 100MHz	80MHz~1.5GHz
FC-8300	0.1Hz - 100MHz	80MHz~3.7GHz

- 10MHz TCXO Internal Time Base
- 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

Model			FC-8150	FC-8300
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	0.1Hz - 100MHz
		input C	80MHz~1.5GHz	80MHz~3.7GHz
	Gate Time		0.01Sec, 0.1Sec, 1Sec, 10Sec	
	Resolution		1mHz to 10Hz	
	Accuracy		\pm Resolution \pm Timebase Error \pm 1count	
Input Characteristics	Terminal		A, C	
	Sensitivity	Input A	30m Vrms	30m Vrms
		Input C	30m Vrms	10m Vrms(80MHz-2.0GHz) 20m Vrms(2.0GHz-3.0GHz) 30m Vrms(3.0GHz-3.2GHz) 40m Vrms(3.2GHz-3.5GHz) 70m Vrms(3.5GHz-3.7GHz)
	Impedance		A Input : 1 M Ω , 40pF, C input : 50 Ω	
	Max. Input Voltage		A Input : 250m Vrms, 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 Capa.	0 to 999999999(Max)	
RPM		6 RPM to 900 x 10 ⁶ RPM		
Time Base Characteristics	Internal Timebase	Frequency	10MHz TCXO	
		Aging Rate	Less than 5x10 ⁻⁶ /month	
		Temp.Stability	Less than 5 x10 ⁻⁶ (0 to +50 $^{\circ}$ C)	
		Line Voltage	Less than 1x10 ⁻⁶ for 10% variation	
	Frequency Standard Output	Frequency	10MHz	
		Amplitude	1.5Vp-p	
		Impedance	600 Ω	
	External Standard Input	Frequency	10MHz	
		Input Level	1.5Vrms to 5Vrms	
Impedance		600 Ω		
General	Power		115 or 230VAC +/- 10% ,48 to 66Hz	
	Operation Temperature		0 to 50 $^{\circ}$ C (Accuracy specified at 25 \pm 5 $^{\circ}$ C)	
	Dimension		240(W) x 270(D) x 90(H)mm	
	Weight		Approx. 2.5Kg	
	Standard Accessories		Power cord,BNC cable, Fuse, Instruction manual	