

1.5GHz UNIVERSAL COUNTER

FC-8150U



FEATURE

- Frequency measuring range : 0.1 Hz to 100 MHz in A, B input
80 MHz to 1.5 GHz in C input
- Period and Total measurement for input A
- Time interval and Ratio measurement for input A and B
- Trigger level adjustment for input A
- Separate and Common mode selectable for input A and B
- Slope mode selectable for input A and B
- 9 Digit display with 0.01 mHz resolution in 1 Sec.
- 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,B: 0.1Hz-100MHz, Input C: 80MHz-1.5GHz				
	Gate Time	0.01Sec, 0.1Sec, 1Sec, 10Sec				
	Resolution	1nHz to 10Hz				
	Accuracy	+/- Resolution +/- TimebaseError +/- 1count				
Input Characteristics	Terminal	A, B, C				
	Sensitivity	A, B, C Input : 30mVrms				
	Impedance	A,B Input : 1 Mohm, 40pF , C input : 50 ohm				
	Max. Input Voltage	A, B Input : 250mVrms, C input : 3Vrms				
	Attenuator	A, B Input : x1, x10				
	Slope A,B	+, - selectable				
	Trigger A	Preset or Variable				
Multi Function for input A	Period	Range : 10mSec to 10Sec				
		Resolution : 1pSec to 1nSec depending on Gate time and input Signal				
		Accuracy : +/- Resolution +/- Trigger Error +/- 1count				
	Totalize	Range : 5Hz to 10MHz Count capacity : 0 to 999999999(Max)				
Comparison Function for input A,B	Time Interval (A to B)	Range : 10mSec to 10Sec				
		L.S.D Display : 100mSec				
		Resolution : +/- L.S.D. +/- Trigger Error				
	Ratio (A/B)	Accuracy : +/- Resolution +/- 1count				
		Range : A input ; 0.1Hz to 100MHz				
		B input ; 5Hz to 100MHz				
Time Base Characteristics	Internal Timebase	L.S.D. Display : A x N/B, N = 1 to 1000				
		Accuracy : +/- 1 Count of A +/- B Trigger Error +/- A				
		- Frequency : 10MHz TCO (TCXO ; Option)				
		- Aging Rate : Less than 5×10^{-6} /month				
	Frequency Standard Output	- Temp. Stability : Less than 5×10^{-6} (0 to $+50 \mu\text{EC}$)				
		- Line Voltage : Less than 1×10^{-6} for 10% variation				
External Standard Input	- Frequency : 10MHz					
	- Amplitude : 1.5Vp-p					
	- Impedance ; Approx. 600 ohm					
General	Power Requirement	- Frequency : 10MHz				
	Operating Temperature	- Input Level : 1.5Vrms to 5Vrms				
	Dimension	- Impedance ; Approx. 600 ohm				
	Weight	115/230VAC +/- 10%, 48 to 66Hz				
	Standard Accessories	0 to 50 μEC (Accuracy specified at 25 +/- 5 μEC)				
Packing Details	-	240(W) x 270(D) x 90(H)mm				
	Inner Packing	Approx. 2.5 kg	Power cord, BNC cable, Fuse, Instruction manual			
	Carton Packing	Q'ty	Size (mm)	N.W. (kg)	G.W. (kg)	Remark
	1	305(W)x330(D)x165(H)	-	2.5		
	3	320(W)x560(D)x360(H)	7.5	8.5		