



# FC-7150U, FC-7015U, FC-7150, FC-7015

UNIVERSAL / FREQUENCY COUNTER



FC-7150U



FC-7015U



FC-7150



FC-7015

## FC-7015U / 7150U Universal Counter

- Frequency measuring range : 0.1Hz~100MHz in A,B input  
80MHz~1.5GHz in C input(7150U only)
- Trigger level adjustment for input A
- Separate and Common mode selectable for input A and B
- Period and Total measurement for input A
- Time interval and Ratio measurement for input A and B
- Slope mode selectable for input A and B

## FC-7015 / 7150 Frequency Counter

- Frequency measuring range : 0.1Hz~100MHz in  
A,B input, 80MHz~1.5GHz in C input(7150 only)
- Period measurement for input A
- Total measurement for input A
- RPM measurement for input A

## FEATURES

- 9 Digit display with 0.01mHz resolution in 1sec
- RS-232C serial interface for communication with computer(Optional)
- High sensitivity external reference input function ( $\geq 20mV_{rms}$ )
- Microprocessor controlled
- Reciprocal technique for high resolution at low counting frequencies
- Self check function executed to perform an automatic self diagnosis of various counter function
- Push - scanning for selecting function and gate time
- Low - pass filter(100kHz, -3dB)installed for removing noise signal in low frequency measuring
- AC/DC coupling function(Selectable X1/X10 Attenuator)
- Data hold function

Supplied by :

**Test and Measurement Instruments C.C.**

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# Specifications

SPEC	MODEL	FC-7150U	FC-7015U	FC-7150	FC-7015
<b>Frequency Measurement</b>	Display	9digit large green LED display (Overflow, Gate time, mHz, kHz, MHz, ns, $\mu$ s, ms, s, Hold)			
	Range	0.1Hz~1.5GHz	0.1Hz~100MHz	0.1Hz~1.5GHz	0.1Hz~100MHz
	Gate time	0.01sec, 0.1sec, 1sec, 10sec			
	Resolution	1nHz ~ 10Hz			
	Accuracy	$\pm$ Resolution $\pm$ timebase error $\pm$ 1count			
<b>Input Characteristics</b>	Terminal	A, B, C	A, B	A, C	A
	Sensitivity	A, B input : 20mVrms, C input : 30mVrms			
	Impedance	A, B input : 1M $\Omega$ <40pF, C input : 50 $\Omega$			
	Max. Voltage	A, B input : 250Vrms, C input : 3Vrms			
	Attenuator	A, B input : $\times$ 1, $\times$ 10			
	Slope A, B	+, - selectable			
	Trigger A	Preset or Variable			
	L.P.Filter	A,B input : 100kHz, -3dB			
<b>Multi Function for Input A</b>	Period	Range : 10ms ~ 10s, Resolution : 1ps ~ 1ns Accuracy : $\pm$ Resolution $\pm$ Trigger Error $\pm$ 1count			
	Totalize	Range : 5Hz ~ 30MHz, Count capacity : 0 ~ 999999999(Max)			
	RPM	-		6 ~ 900 $\times$ 10 <sup>6</sup> RPM	
<b>Comparison Function for Input A, B</b>	Time Interval(A $\rightarrow$ B)	Range : 0.1 $\mu$ s ~ 10s LSD Display : 100ns Resolution : $\pm$ LSD $\pm$ Trigger Error Accuracy : $\pm$ Resolution $\pm$ 1count			
	Ratio(A/B)	Range : A input : 0.1Hz ~ 10MHz B input : 0.1Hz ~ 10MHz LSD Display : A $\times$ N / B, N = 1~1000 Accuracy : $\pm$ 1count of A $\pm$ B Trigger Error $\pm$ A			
<b>Time Base Characteristics</b>	Internal Time base	- Frequency : 10MHz TCO(TCXO : Option) - Aging Rate : <3 $\times$ 10 <sup>-7</sup> / month - Temperature Stability : <5 $\times$ 10 <sup>-6</sup> ( 0~+50 $^{\circ}$ C ) - Line Voltage : <1 $\times$ 10 <sup>-7</sup> for 10% variation			
	Frequency Output	Frequency : 10MHz, Amplitude : 2.5Vp-p, Impedance : Approx. 500 $\Omega$			
	External Input	Frequency : 10MHz, input level : 20mV ~ 5Vrms, Impedance : Approx. 500 $\Omega$			
<b>General</b>	Power Requirement	AC115 / 230V $\pm$ 10% (50 / 60Hz)			
	Operating Temperature	0 ~ 40 $^{\circ}$ C (specified at 25 $^{\circ}$ C $\pm$ 5 $^{\circ}$ C)			
	Dimension	225(W) $\times$ 260(D) $\times$ 80(H)mm			
	Weight / Accessories	Approx. 2kg / Power cord, BNC cable, Fuse, Operator's manual			

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