

# FC-3000



UNIVERSAL / FREQUENCY COUNTER



## FEATURES

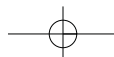
- Frequency measuring range : 0.1Hz to 100MHz in A input  
80MHz to 3.0GHz in C input
- Period, Total and RPM measurement for input A
- 9 Digit display with 0.01mHz resolution in 1 Sec(By Ext. Reference signal)
- RS-232C serial interface function for communicating with computer
- High sensitivity external reference input function( $\geq 1.5V_{rms}$ )
- 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 AC/DC Coupling)
- 10:1 Input Attenuation (Selectable x1/x10 Attenuator)
- Data hold function

Supplied by :

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

[www.instrumentsgroup.co.za](http://www.instrumentsgroup.co.za)

[t.m.i@iafrica.com](mailto:t.m.i@iafrica.com) Tel: 0027 (011) 683 4365





# Specifications

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FUNCTION		SPECIFICATION				
<b>Display</b>		9 digit large green LED display, Overflow, Gate time, mHz, Hz KHz, MHz, nS, $\mu$ S, Ms, S, HOLD				
<b>Frequency Measurement</b>	Range	0.1Hz to 100MHz(A input), 80MHz to 3.0GHz(C input)				
	Gate Time	0.01Sec, 0.1Sec, 1Sec, 10Sec				
	Resolution	1nHz to 10Hz				
	Accuracy	$\pm$ Resolution $\pm$ Timebase Error $\pm$ Count				
<b>Input Characteristics</b>	Terminal	A, C				
	Sensitivity	A input: 20mVrms, C input: 30mVrms				
	Impedance	A input: 1 Mohm, Less than 40pF, C input: 50 ohm				
	Max. Input Voltage	A input: 250Vrms, C input: 3Vrms				
	Attenuator	A input: x1, X10				
	Low Pass Filter	A input 100 kHz, -3dB				
<b>Multi Function for Input A</b>	Period	Range: 10mSec to 10 Sec Resolution : 1pSec to 1nSec depending on gate time and Input signal Accuracy: $\pm$ Resolution $\pm$ Trigger error $\pm$ 1 Count				
	Totalize	Range: 5 Hz to 10 MHz Count capacity: 0 to 999999999(Max.)				
	RPM	6 ~ 900 x 10 <sup>6</sup> RPM				
<b>Timebase Characteristics</b>	Internal Timebase	Frequency: 100MHz TCO(TCXO; option) Aging Rate: Less than 5 x 10 <sup>-9</sup> /month Temp. Stability: Less than 5 x 10 <sup>-6</sup> (0°C ~ +50°C) Line Voltage: Less than 1 x 10 <sup>-6</sup> for 10% variation				
	Frequency Standard Output	Frequency: 10MHz Amplitude: 1.5 Vp-p Impedance: Approx. 600ohm				
	External Standard Input	Frequency: 10MHz Amplitude: 1.5 Vrms to 5 Vrms Impedance: Approx. 600ohm				
<b>General</b>	Power Requirement	115/230 VAC +/-10%, 48 to 66 Hz				
	Operating Temperature	0 to 50°C (Accuracy specified at 25 +/-5°C)				
	Dimension	240(W) x 270(D) x 90(H)mm				
	Weight	Approx. 2.5kg				
	Standard Accessories	Power Cord, BNC to BNC cable, Fuse, instruction Manual				
	Optional Accessories	RS-232C Software, RS-232C Cable				
<b>Packing Details</b>		Q'ty	size(mm)	N.W.(kg)	G.W.(kg)	Remark
	Inner Packing	1	305(W) x 330(D) x 165(H)	2.0	2.5	
	Carton Packing	3	320(W) x 560(D) x 360(h)	7.5	8.5	

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