

Universal / Ferquency Counter

8013 / 8023 / 8030 / 8030U / 8037



Features

- Frequency measuring range - A,B input : 0.1Hz to 100MHz
- C input : 80MHz to 3.0GHz(8030U, 8030), 80MHz to 1.5GHz(8023, 8013), 80MHz to 3.7GHz(8037)
- 9 digits display with 0.01mHz resolution by external reference • Period and Total measurement • High sensitivity external reference
- RPM measurement(8037, 8030, 8013 Only) • Time interval and Ratio measurement(8030U, 8023 Only) • Data hold function • 10:1 Input attenuation
- Trigger level adjustment for input A(8030U, 8023 Only) • Separate and common mode selectable(8030U, 8023 Only) • AC/DC coupling function
- Slope mode selectable for input A and B(8030U, 8023 Only) • RS-232C serial interface function • Reciprocal technique for high resolution

Technical Specifications

MODEL		8037	8030 / 8013	8030U / 8023
Display		9 digit large green LED display, Overflow, Gate time, mHz, Hz, kHz, MHz, nS, uS, mS, S, HOLD		
Frequency Measurement	Measuring Range	Input A : 0.1Hz ~ 100MHz	Input A : 0.1Hz ~ 100MHz	Input A, B : 0.1Hz ~ 100MHz
		Input C : 80MHz ~ 3.7GHz	Input C : 80MHz ~ 3.0GHz (8030) Input C : 80MHz ~ 1.5GHz (8013)	Input C : 80MHz ~ 3.0GHz (8030U) Input C : 80MHz ~ 1.5GHz (8023)
	Gate Time	0.01Sec, 0.1 Sec, 1 Sec, 10 Sec		
	Resolution	1 mHz to 10 Hz		
Accuracy		± Resolution ± Timebase Error ± 1 Count		
Input Characteristics	Terminal	A, C	A, B(8030, 8013) / A, B, C(8030U, 8023)	
	Sensitivity	Input A : 30mVrms	Input A, B : 30mVrms	
		Input C : 10mVrms(80MHz ~ 2.0GHz) 20mVrms(2.0GHz ~ 3.0GHz) 30mVrms(3.0GHz ~ 3.2GHz) 40mVrms(3.2GHz ~ 3.5GHz) 70mVrms(3.5GHz ~ 3.7GHz)	Input C (8030, 8030U) 25mVrms(80MHz ~ 150MHz), 20mVrms(150MHz ~ 2.0GHz), 60mVrms(2.0GHz ~ 3.0GHz) Input C (8013, 8023) 35mVrms(80MHz ~ 1.1GHz), 70mVrms(1.1GHz ~ 1.5GHz)	
	Impedance	A Input : 1 MΩ, C Input : 50 Ω		A, B Input : 1 MΩ, C Input : 50 Ω
	Max. Input Voltage	A Input : 250Vrms, C Input : 3Vrms		A, B Input : 250Vrms, C Input : 3Vrms
	Attenuator	A Input : x1, x10		A, B Input : x1, x10
	Slope A, B	Not Applied		± selectable
	Trigger A			Positive or Variable
Low Pass Filter	A Input : -3dB point at Approx. 100kHz		A, B Input : -3dB point at Approx. 100kHz	
Comparison Function For Input A, B	Period	Range : 10nSec to 10Sec / Resolution : 1pSec to 1nSec depending on gate time and Input signal Accuracy : ± Resolution ± Trigger error ± 1 count		
	Totalize	Range: DC to 30 MHz, Count capacity: 0 to 999999999(Max.)		
	RPM	6 RPM to 600 x 107 RPM		
Time Base Characteristics	Time Interval (A to B)	Not Applied		Range : 10mSec to 10Sec L.S.D Display : 100mSec Resolution : ± L.S.D ± Trigger error Accuracy : Resolution ± 1 count
	Ratio (A / B)			Range : - A Input : 0.1Hz to 100MHz - B Input : 5Hz to 100MHz Accuracy : Resolution 1 count L.S.D. Display : A x N/B(N = 1 to 1000)
General	Internal Timebase	Frequency : 10MHz TCO(TCXO: option) / Aging Rate : Less than 5 x 10-6/month Temp. Stability : Less than 5 x 10-6(0°C to +50°C) / Line Voltage : Less than 1 x 10-6 for 10% variation		
	Frequency Standard Output	10 MHz, 1Vpp or more(Open-load)		
	External Standard Input	10 MHz, 1.5 Vrms to 5 Vrms		
	Power Requirement	115 or 230 VAC ± 10%, 48 to 66Hz		
	Dimension / Weight	240(W) x 270(D) x 90(H) mm / Approx. 2.5 kg		
	Standard Accessories	Power Cord, BNC to BNC cable, Fuse, Instruction Manual		