

SEINTEK® C3100 2.4GHz Programmable Universal Counter

C3110 120MHz Programmable Universal Counter

C3120 2.4GHz Programmable Multifunction Counter

Features



- Programmable**
 - Record (MAX / MIN): Records and displays the MAX and MIN values of the input freq.
 - Relative (REF / ERR): Displays Reference frequency and the deviation of the measured frequency from the reference frequency as a % error.
 - Compare (GO-NOGO): The LCD will display **PASS** if the input frequency is with in the HI/LO limits, **LO** if the frequency is lower than the LO limit and **HI** if the frequency is higher than the HI limit.

- Frequency range**
 - CHC: 2.4GHz (CHA, B: 120MHz)

- Measurement**
 - FRQ. A, FRQ. B, FRQ. C, Time interval, Totalize, Ratio A/B, Difference Freq. (A-B), Duty cycle and RPM (See Model No.: C3100, C3110 or C3120)

- Resolution**
 - 7 Digits

- Range**
 - Full Auto Range

- Trend Plot**
 - The REF is the centerline value on the trend graph, H/DIV is the X axis (time) and V/DIV is the Y axis (amplitude).

- Setup**
 - Setting and functions may be selected and stored in memory from the front panel. Eight setups may be stored in memory.

- Equipment**
 - Displays information about your instrument including the Model number, serial number, Calibration date, GP-IB address and Firmware revision.

- Remote Control**
 - Function and ranges may be controlled from a PC via the RS232 or the optional GP-IB interface.

- Power Source**
 - May be used with any line voltages from 85V to 270Vac (±10%, 48 to 66Hz) without any internal changes.

- Display**
 - 128 by 64 pixel Super Twisted LCD display



Programmable Record



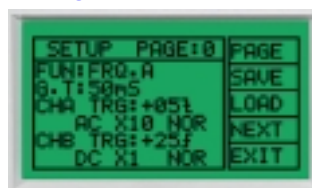
Programmable Relative



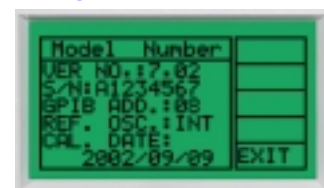
Programmable Compare



Trend Plot



Setup



Equipment

Electrical Specifications

Description		C3100	C3110	C3120		
CHA input Characteristics	Frequency Range	0 to 120MHz(DC Coupled), 10Hz to 120MHz(AC coupled)				
	Sensitivity	25mV RMS (Sine Wave)				
	Impedance	1Mohm less with less than 35pF capacitance				
	Attenuator	x1, x10				
	Max. Input voltage	250V (DC or AC Peak)				
	Trigger level	±1.28V variable.				
	Trigger slope	Positive or Negative				
CHB input Characteristics	Same as CHA	Same as CHA				
CHC input Characteristics	Frequency Range	100MHz to 2.4GHz				
	Sensitivity	25mV RMS (Sine Wave)				
	Coupling	AC				
	Max. Input voltage	5V (DC or AC peak)				
Measurement Function	(1) FRQ. A	<ul style="list-style-type: none"> ▪ Range: 0 to 120MHz(DC Coupled), 10Hz to 120MHz(AC coupled) ▪ Coupling: AC or DC ▪ Slope: Positive or Negative ▪ Trigger level: ±1.28V variable. (The trigger level is displayed as a scale -99 to +99 units) ▪ Low Pass filter: Approximately 100kHz ▪ Attenuation: 0 and 20dB (x1 and x10) ▪ Resolution: 0.00001Hz (Gate time = 1Sec, Input Frq = 200Hz) ▪ Accuracy: ±Time Base Error ±1 Count 				
	(2) FRQ.B:	▪ Same as FRQ. A				
	(3) FRQ.C:	<ul style="list-style-type: none"> ▪ Range: 100MHz to 2.4GHz ▪ Slope: Positive or Negative ▪ Trigger level: Auto ▪ Coupling: AC ▪ Accuracy: ±Time Base Error ±1 Count 				
	(4) Time Interval (A→B):	<ul style="list-style-type: none"> ▪ Range: 0.5uS to 0.2S (5Hz to 2MHz) ▪ Pulse width: 250nS minimum ▪ Resolution: 0.1uS Max ▪ Accuracy: Time Base Error ± CHA Trigger Error ± Magnification ±1 Count 				
	(5) TOT. A (Totalize):	<ul style="list-style-type: none"> ▪ Range: DC to 10MHz ▪ Count Capacity: 0 to 9,999,999 (Over Flow) ▪ Hold button controls the Start and Stop 				
	(6) Ratio A/B	<ul style="list-style-type: none"> ▪ Range: CHA input: 10MHz to 120MHz, CHB input: 0.1MHz to 10MHz ▪ Accuracy: CHB Trigger Error/(CHB Freq. x Gate Time) ±1 Count 				
	(7) A-B Freq. Difference:	<ul style="list-style-type: none"> ▪ Frequency Range: Same as CHA and CHB ▪ Accuracy: Time Base Error ±1 Count 				
	(8) DTY. A (Duty Cycle):	<ul style="list-style-type: none"> ▪ Range: 1 to 100kHz ▪ Duty cycles from 0.1% to 99% may be measured. 				
	(9) RPM A measure:	<ul style="list-style-type: none"> ▪ Maximum RPM: 600,000 RPM ▪ Minimum pulse width: 250nS 				
	GATE Times	<ul style="list-style-type: none"> ▪ 50mS, 100mS, 200mS, 300mS, 400mS, 500mS, 600mS, 700mS, 800mS, 900mS, 1S, 2S, 3S, 4S, 5S, 6S, 7S, 8S, 9S, 10S ▪ Gating Accuracy Time base accuracy: 1ppm 				
Reference Time Base Oscillator	<ul style="list-style-type: none"> ▪ Standard Frequency: 10MHz, 4.194304MHz ▪ Frequency Stability: ±5.0ppm max. ▪ Aging Rate: ±1.0ppm max./year ▪ Temperature: -30°C to +60°C ▪ Storage Temp. Range: -40°C to +85°C 					
General	Power Source	85V to 270Vac(±10%, 48 to 66Hz)				
	Dimensions / Weight	235(W) x 296(D) x 85(H) mm / About 1.5 kg				
	Standard Accessories	Users Manual, BNC cable (BNC & Clip), Line Cord, Spare fuse, RS232 Cable and S/W				
	Optional Accessories	GP-IB (IEEE-488.2) Interface (Installed)				
Packing Details	Packing	Q'ty	Size (mm)	N.W. (kg)	G.W. (kg)	Remark
	Inner	1	265(L) x 375(W) x 115(H)	-	2.2	
	Carton	4	550(L) x 405(w) x 270(H)	8.8	10	