

# SEINTEK® C3100 2.4GHz Programmable Universal 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.

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

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- 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)

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- Resolution**
  - 7 Digits

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- Range**
  - Full Auto Range

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- 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).

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

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- Equipment**
  - Displays information about your instrument including the Model number, serial number, Calibration date,

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

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

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



Programmable Record



Programmable Relative



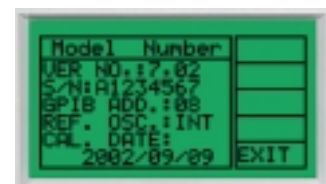
Programmable Compare



Trend Plot



Setup



Equipment

**Electrical Specifications**

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