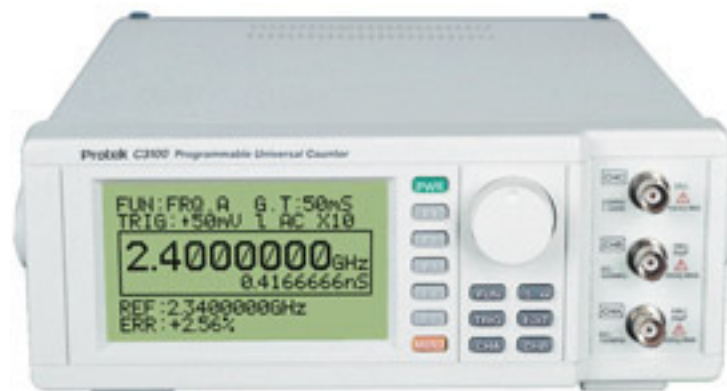


- Highly accurate frequency measurements to 2.4GHz
- Measures Frequency, Period, Duty Cycle, RPM, Frequency ratio, Difference frequency, Time interval and Totalize
- Nine measurement functions
- Plots trend graph on LCD display
- Compare, Relative Error and Min/Max functions
- Standard RS-232 with optional GPIB interface
- Eight setup screens may be saved and retrieved from memory
- Software for controlling, displaying data and data logging
- Operates on all line voltages from 85V to 270V without any changes



C3100

■ SPECIFICATIONS

Frequency Measurement

Freq A

Ranges: DC coupled: 0 to 120MHz AC coupled: 10Hz to 120MHz
Resolution: 0.00001Hz @ 200Hz
Gate Times: 50ms to 10s (20 settings)
Accuracy: ± 2 PPM; Coupling: AC or DC
Trigger Level: ± 1.8 V in a scale from -99 to +99

Freq B

Ranges: DC coupled: 0 to 120MHz
AC coupled: 10Hz to 120MHz
Resolution: 0.00001Hz @ 200Hz
Gate Times: 50ms to 10s (20 settings)
Accuracy: ± 2 PPM; Coupling: AC or DC
Trigger Level: ± 1.8 V in a scale from -99 to +99

Freq C

Ranges: 100MHz to 2.4GHz
Resolution: 100Hz @ 500MHz
Gate Times: 50ms to 10s (20 settings)
Accuracy: ± 2 PPM + 1 count
Coupling: AC only
Trigger Level: Auto

Totalize

Input: CH A
Frequency Range: DC to 10MHz
Count Capacity: 0 to 99,999,999 counts
Resolution: 1 count
Accuracy: ± 1 count

Time Interval (A→B)

Input: CH A and CH B
Range: 0.5 μ s to 200,000 μ s
Minimum Pulse Width: 250ns
Resolution: 1 μ s
Accuracy: ± 1 count + timebase accuracy

Ratio (A/B)

Inputs: CH A and CH B
Range: CH A: 10MHz to 150MHz CH B: 0.1MHz to 10MHz
Resolution (0.000001)

Duty Cycle

Input: CH A
Measurement Range: 0.01% to 99.99%
Frequency Range: 0 to 100kHz

RPM

Input: CH A
Measurement Range: 0 to 600,000 RPM
Minimum Pulse Width: 250ns
Resolution: 0.1 RPM

Input Characteristics

Channel A & B
Frequency Range: 0 to 120MHz
Sensitivity: 25mV
Input Impedance: 1M Ω + 35 μ F capacitance
Attenuator: X1, X10
Maximum Input Volts: 250V DC or AC peak

Channel C

Frequency Range: 100MHz to 2.4GHz (usable to 2.7GHz)
Sensitivity: 25mV RMS (100MHz to 2.4GHz)
Maximum Input voltage: 5V DC or AC peak
Attenuator: None
Input Impedance: 50 Ω

Reference Timebase Oscillator

Standard Frequency: 10MHz, 4.194304MHz
Frequency Stability: ± 5.0 PPM Max
Aging Rate: ± 1.0 PPM Max/Yr
Temperature: -30 to +60°C
Storage Temperature Range: -40 to +85°C

Software

The supplied software is a Windows®-based program, which runs under Windows 95/98/ME/XP/2000. It allows the user to set the Instrument Parameters from the PC via the RS-232 interface and provides time stamped data logging for all functions.

General Specifications

Display: 128 x 64 pixel super twist LCD
Line Voltage: AC input Volts: 85 to 270 V AC $\pm 10\%$
Line Frequency: 48Hz to 66Hz
Power Consumption: 15W
Operating Temperature: 0 to 40°C (32 to 104°F)
Size: 3.3" H x 11.6" W x 11.0" D Weight: 4.4 lbs.
Supplied Accessories: Manual, Line cord, BNC cable, Software, RS-232 cable
Optional Accessory: GPIB (installed)