

# World-leading Oscillator Manufacturer buys 120 units of CNT-90 Timer/Counter/Analyzer



## Background

A world-leading oscillator manufacturer with a global customer base develops and produces high performance quartz products (TCXOs) and crystal components for demanding applications.

They needed to invest in several timers/counters for fast and precise measurements in their test systems and R&D labs. Required measurements included:

- Fast frequency and peak-to-peak voltage verification of oscillators in the test systems.
- Test of start-up time from power-on until frequency is within limits.
- Long and short term stability measurements & statistical analysis.

## Double throughput compared to Agilent!

The customer decided to invest in 120 units of CNT-90 Timer/Counter/Analyzer from Pendulum Instruments. Here are the words from the customer:

*"We selected Pendulum's CNT-90 over equivalent products from HP/Agilent (model 53181A) due to these outstanding features of the CNT-90:*

1. *CNT-90 is able to make frequency and also peak-to-peak voltage measurements much faster than equivalent products from HP/Agilent.*
2. *There is no need for a PC - CNT-90 gives us graphical presentation of results like histograms, trends, modulation domain etc, which we found to be very useful in our R&D department.*
3. *The CNT-90 has no delay in gate time. The Agilent model that we tested has around 30 to 50 ms overhead in gate time. The no-command latency is very useful when doing millions of measurements. **By effectively using the CNT-90 we were able to double our throughput!***
4. *The CNT-90 has lower gate jitter than equivalent products. (This does however require good Signal-to-Noise ratio to take advantage of.)*
5. *The CNT-90 is newer technology compared to equivalent products from HP/Agilent - which implies that more advantages are to be expected..."*

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## Success Summary

The Customer's way to Success:

- Invest in CNT-90, the fastest Timer/ Counter on the market - double the throughput
- Graphical presentation - No need for a PC
- CNT-90 has newer technology - advantages are to be expected

## CNT-90 - The Ultimate Tool

Product Features:

- Fastest: 250k measurements/s to internal memory & 2k/s via GPIB
- Highest resolution: 12 digits/s
- 14 digits display
- Frequency range: 300 MHz (standard), 3, 8, 14, 20 GHz (optional)
- Unique ease-of-use: Multi-parameter display and graphical presentation of results
- USB and GPIB as standard
- Outstanding performance/price