

Ultra-Low Phase Noise Drives Performance Improvements for Phase Noise Test Sets, Signal Generators and Spectrum Analyzers



Vectron International recently announced its OX-045, an Ultra Low Noise (ULN) oven-controlled crystal oscillator (OCXO). The OX-045 is the inaugural product offering with Vectron's unique ULN crystal and circuitry technology.

The OX-045 improves Vectron's existing low-noise products by lowering the close-in phase noise by 10 dBc/Hz, allowing customers to improve the performance of their top of the line test equipment. It utilizes an Ultra Low Noise fifth overtone SC-cut crystal offering the best close-in phase noise and aging performance. The crystal is then mated with Vectron's new proprietary oscillator circuit to minimize any additional noise contributions.

Specific features of the OX-045 include:

- Industry leading close in phase noise for a 10 MHz OCXO
 - a) -140 dBc/Hz at 10 Hz offset
 - b) -163 dBc/Hz Noise Floor
- Excellent Temperature stability of plus/minus 3 ppb -0°C to 70°C
- State-of-the-art yearly aging of 10 ppb/year.

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<http://www.wirelessdesignmag.com/product-releases/2010/06/ultra-low-phase-noise-drives-performance-improvements-phase-noise-test-sets-signal-generators-and-spectrum-analyzers?qt-blogs=0>