



High Spectral Purity Synthesizer

The HSX Series was developed to be one of the cleanest CW sources available. Phase noise performance, spurious rejection and harmonic/sub-harmonic rejection were the primary focal points during the development cycle. The result is a high performing, broadband CW source.

The HSX Series was initially released as a 10 MHz to 6 GHz CW source with subsequent models operating to 10 and 20 GHz. This series of broadband frequency sources exhibit industry leading phase noise and spectral purity performance coupled with a highly accurate dynamic range of +18 to -110 dBm. The 1U high

form factor will be available in 1, 2, 3 or 4 channel models; all providing the ultimate in frequency accuracy, channel-to-channel stability and phase coherent channels. The 10 and 20 GHz models are anticipated by early 2015.

Phase noise is a critical performance parameter for high speed communications systems, subsystems, components and chipsets. The phase noise performance of the HSX Series is derived from years of development of proprietary techniques that optimize both close-in phase noise (long term stability) and far-from-the carrier phase noise (instantaneous stability), while maintaining true phase coherency.

At 6 GHz, the phase noise is -86 dBc/Hz at 10 Hz offset, -126 dBc/Hz at 10 kHz offset and -138 dBc/Hz at 10 MHz offset. Phase noise at 1 GHz is -144 dBc/Hz at 10 kHz offset. Harmonics are well below -40 dBc and all spurious artifacts are less than -87 dBc.

Holzworth RF Synthesis products come with a three-year warranty against manufacturing defects and offer industry leading spectral purity.

VENDORVIEW

Holzworth Instrumentation
Boulder, Colo.
(303) 325-3473
www.holzworth.com



Handheld Microwave Spectrum Analyzer

and lightest spectrum analyzers currently available.

Instead of focusing on features that would only be useful in a laboratory environment, this device has the qualities and functionality frequently requested by microwave field engineers to efficiently perform their daily tasks – radio parameter verification, antenna alignment, interference and multipath detection, power in band measurements and link troubleshooting, while saving the spectrum curves for reports and further analysis.

The unit utilizes a resistive touch screen for ease of use in the field, while still allowing the engineer to wear gloves to manipulate the device. Spectrum Compact's high sensitivity (-105 dBm) and low noise floor enables field engineers to detect even exceptionally weak signals. The de-

vice has the capability to perform a multitude of tasks from the ground level, and troubleshoot links without interrupting site traffic.

A standard kit includes the spectrum analyzer, an RF cable and a waveguide adapter. The waveguide adapter itself can be used as a low gain antenna. Just by pointing it towards the transmitting radio, the Spectrum Compact will detect and visualize the incoming signal. The instrument is compatible with any manufacturer's antenna and SAF also provides a set of handheld horn antennas for use with Spectrum Compact as an additional interference detection accessory in case a parabolic antenna is not available onsite.

SAF Tehnika JSC
Riga, Latvia
www.saftehnika.com

Spectrum Compact is a light and easy to use measurement solution for the 6 to 40 GHz licensed microwave frequency bands. Designed specifically for comfortable outdoor use in a variety of challenging environments, this battery-powered device has been developed for microwave radio engineers performing equipment installation, link troubleshooting, site maintenance or gathering data for site planning purposes.

One of the most prominent features of the SAF Spectrum Compact is its form factor. The dimensions of the device are close to those of a cell phone, making it one of the smallest