

Holworth Multi-Channel RF Synthesizers And Boonton True-Average Connected RF Power Sensors



Demonstration:

With today's supply chain challenges, component manufacturers are racing to get products out as fast as possible. One element is to improve test time. With products like the **Holworth HS9000B** Multi-channel RF Synthesizers and **Boonton CPS2008** True-Average Connected RF Power Sensors, users can conduct **parallel automated test** in a very compact test configuration.

The HS9000B Multi-channel RF Synthesizers are also ideal for use as phase coherent local oscillators in **quantum computing** applications. The HS9000B series offers an industry best channel density with up to 32 independently controlled, phase-coherent channels in a 1 U chassis.

Target Users:

Users include OEMS, integrators, and contract manufacturers performing automated testing and looking for better equipment utilization and higher production throughput.

Engineers and technicians who use RF synthesizers as local oscillators when designing, verifying, and troubleshooting in quantum computing applications.

Product Overview:

HS9000B Series of Multi-Channel RF Synthesizers

The Holworth HS9000B Series Multi-Channel RF Synthesizer platform is designed to achieve optimal channel-to-channel stability across all integrated channel synthesizers via a silent, conductively cooled, fan-less enclosure. Specific attention is paid to phase coherency between the independently controllable channels.

The HS9000B Series is a unique platform allowing the user to specify custom configurations for a COTS product. Units may be loaded with anywhere from 1 to 32 channels, with the additional flexibility to specify each channel's frequency range and performance options. The result is a high performance, multi-channel synthesizer that is tailored to an application with an optimal price point.

Key Specifications and Features:

- Fully independently tunable channels up to 32 channels in a 1 U chassis
- Phase coherent channels
- 200 μ s frequency switching speed
- 10 MHz to 18 GHz, -50 to +20 dBm
- Excellent channel-to-channel stability



Ideal for quantum computing applications!

CPS2000 True Average Connected Power Sensors

CPS2000 True Average Connected Power Sensors provide USB, LAN and PoE capabilities to enable easy RF power measurement of modulated and CW signals from 50 MHz to 8 GHz. Compatible with Windows and Linux systems, CPS2000 sensors include all the necessary drivers for programming through SCPI, IVI and LabVIEW. Connectivity and compatibility, combined with 60 dB dynamic range and 100 measurements per second make CPS2000 sensors the ideal solution for lab, field, production test, ATE, remote monitoring, and embedded environments.

Key Specifications and Features:

- 50 MHz to 8 GHz frequency range
- -40 dBm to + 20 dBm dynamic range
- True average power measurements for CW and modulated signals
- USB and LAN (with PoE) connectivity
- Easy, intuitive control through the Boonton Power Viewer GUI
- GUI can control up to 8 sensors; use direct control to operate additional sensors

About Boonton Electronics:

Boonton Electronics is a leader in high performance RF and microwave test equipment for radar, avionics, electronic warfare, satellite and wireless communications, and EMI/EMC applications. Used across the semiconductor, military, aerospace, medical, and communications industries, Boonton products enable a wide range of RF signal generation, power measurement, and signal analysis for RF product design, production, maintenance, and system integration. The Boonton product portfolio includes RF signal generators, peak and average RF and microwave power meters, real-time USB power sensors, LAN power sensors, RF voltmeters, modulation analyzers, and audio analyzers.

About Holzworth Instrumentation:

Holzworth Instrumentation is a leader in high-performance phase noise analyzers and signal generators for test and measurement solutions in government, commercial, and academic environments. Optimized for ultra-low phase noise performance, Holzworth products offer fast switching speeds, spectral purity, accuracy, and high reliability while meeting stringent performance specifications in a unique form factor. The Holzworth product portfolio includes real-time phase noise analyzers, broadband RF and microwave synthesizers, frequency dividers, amplifiers, downconverters, phase detectors, and phase shifters.

More Resources:

- **HS9000B:** <https://holzworth.com/products/rf-synthesizer-modules>
- **CPS2008:** <https://boonton.com/products/rf-power-sensors/cps2000-true-average-connected-power-sensors>