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Berkeley Nucleonics Corporation Launches Model 870A Series of High-Performance Analog Signal Generators

Blog Post

San Rafael, California – BNC proudly announces the debut of the Model 870A series of high-performance analog signal generators. Alongside the previously introduced Model 845 and 865 series, BNC now offers a comprehensive range of signal generators tailored to meet various performance needs, allowing engineers to choose the optimal instrument with the best performance-price ratio.

The Model 870A series covers frequency ranges up to 54 GHz and 51 GHz, respectively, with output power exceeding 15 dBm at the high-frequency end. Both series support all analog modulation schemes. When benchmarked against similar market offerings, the 870A stands out with the following unique performance features:

- **Lowest Phase Noise:** With phase noise levels reaching -97 dBc/Hz (870A) at 100 Hz, and -130 dBc/Hz (870A) at 20 kHz from 10 GHz, both instruments boast the lowest phase noise among market competitors.
- **Fastest Frequency Switching:** Consistent with our other signal sources, the 870A achieve switching times faster than 15 μ s and 5 μ s, respectively, enabling rapid frequency sweeping.
- **High Signal Purity:** Harmonics, subharmonics, and spurious signals are minimized, achieving levels as low as -60 dBc and -70 dBc, respectively.
- **Multi-Channel Models with Strong Phase Coherence:** A single 19" 2U module can host up to 4 independent channels, with multiple modules phase-coherently synchronized.

These high-performance signal generators are poised to unlock numerous applications, including wireless communications (MIMO and beamforming), radar and electronic warfare (phase array radars and electronic countermeasures), quantum computing research, and various industrial, medical, and metrological test and measurement (T&M) requirements.

BNC has continuously advanced the key performance metrics of analog signal sources. We are thrilled to introduce these latest instrument series.

Berkeley Nucleonics Corporation is a leading manufacturer of precision electronic instrumentation for test and measurement, radiation detection, nuclear research, and RF/microwave. From signal generators to spectrum analyzers, we offer the widest range of signal generation and analysis tools from a single manufacturer. Our application engineers are always available to discuss your specific needs. BNC happily offers product demonstrations if you're interested in testing out a unit on site to make sure that it is right for you.