

LN VS LN+ OPTIONS

Blog Post

We will first identify that LN stands for “Low Noise,” i.e. further lowered phase noise parameters. The LN option achieves this by implementing a particular Model 100MHz oven controlled crystal oscillator (OCXO) onto the signal reference board. The LN+ option uses the same implementation, but with a different model OCXO with better long term precision specifications. This translates to higher precision over longer duration applications. The standard unit will see internal reference frequency degradation of up to 1000 ppb/year, while the LN and LN+ will see 30 and 20 ppb/year respectively.

One will want to consider upgrading to the LN option when low phase noise and accurate signal is desired. Further consideration of the LN+ option is necessary for longer duration applications. BNC offers the LN and LN+ options in the Models [825](#), [855B](#), and [865B](#) RF signal generators and in the [Model 875](#) vector signal generator.



With a legacy of over 60 years in the industry, Berkeley Nucleonics Corporation continues to push the boundaries of microwave and RF technology. The company's extensive portfolio of cutting-edge products, including signal generators, microwave synthesizers, pulse generators, phase noise analyzers, and spectrum analyzers, has garnered recognition from researchers and engineers worldwide.

IMS 2023 is widely regarded as the largest technical conference and industry exhibition for RF, microwave, millimeter-wave, and THz researchers and practitioners from academia, industry, and government. The event attracts a diverse range of attendees seeking the latest advancements and networking opportunities in the field.

"We are excited to exhibit at IMS 2023 and share our latest innovations with the global microwave community," said Allan Gonzalez, Vice President of Berkeley Nucleonics Corporation. "Our team has been working tirelessly to develop state-of-the-art RF equipment that addresses the evolving needs of our customers. This event provides a unique platform to engage with industry experts and showcase our cutting-edge products."



MODEL 875



7000 SERIES



12100 SERIES

What is the difference between LN and LN+?

The key difference between the two is that LN+ has better long-term performance. Option LN adds a 100 MHz OCXO on the ref board, applying to all channels. LN+ adds a different Model 100 MHz OCXO with better long term stability. For short-term performance they are nearly identical, but for longer time applications the better Allan Variance of LN+ yields a more accurate result. One can incorporate either LN or LN+, the options are priced per unit and cannot be combined.