

LNS-18 Option 2 Microwave Pulse Modulator

Low noise Pulse CW and Add Pulse Noise measurements require low jitter pulse generator and high ON/OFF pulse modulator (MW switches).

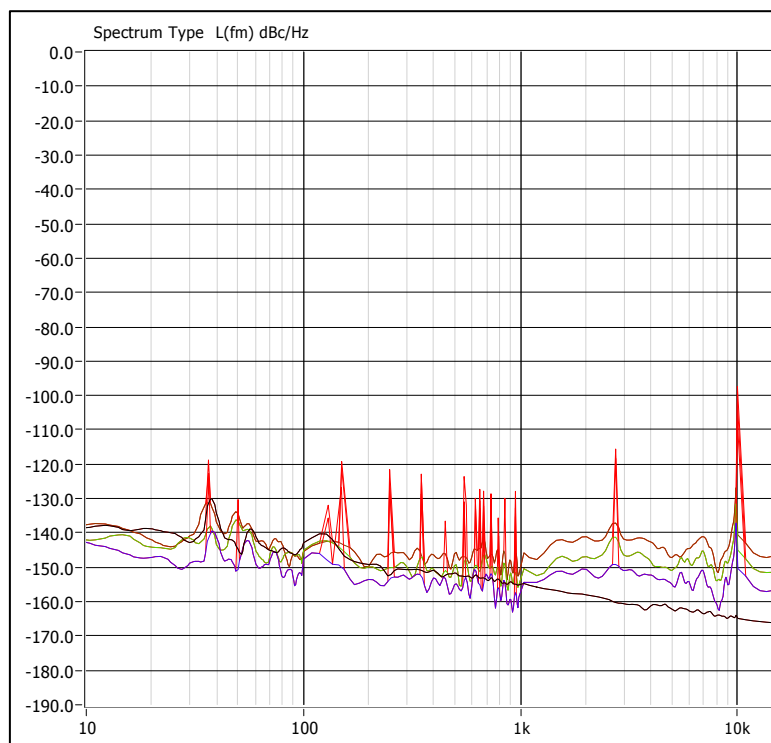
The option 2 adds to the LNS-18 a microwave SPST absorptive switch to modulate the microwave CW signal generated on the synthesizer block.

In order to not lower the maximum output power of the LNS-18, this solid-state switch can be bypassed by electro-mechanical relays when the modulator is not needed (modulation OFF).

An external pulse generator signal (TTL 50 Ohms) must be connected to the Modulation Input BNC connector.

Typical Performance:

Operating Frequency :	2-18 GHz
Insertion Loss :	2 to 4 dB depending on frequency
Rise / Fall time :	25 ns
On / Off time (TTL to RF):	60 ns
Control Logic :	TTL "1" = RF ON
Minimum pulse width :	100 ns
Phase & Amplitude Noise :	Please see example below



Residual Phase Noise measurement at 8 GHz using the Option 2

Note: this measurement is done in Europe where AC is 50Hz, many spurious on this plot are AC related harmonics.