

## 2014 Frequency Synthesizers



## MicroLambda Wireless Frequency Synthesizers

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Micro Lambda Wireless offers a very extensive frequency synthesizer product line with standard designs covering from 500 MHz to 22 GHz. From the low cost single loop designs, all the way up to wideband configurations that out perform some test equipment, Micro Lambda leads the market in YIG-Based synthesizers today. Our standard product offerings include low cost configurations covering the 2- 12 GHz range in 2 or 3 GHz tuning ranges with as low as 100 kHz step size, narrow band multi-loop configurations covering the 2 to 16 GHz frequency range with 2 to 4 GHz tuning bands and low phase noise performance, wide band multi-loop configurations covering 600 MHz to 3 GHz and 2-10 GHz with 1 Hz step size and 2 to 20 GHz low noise PXI based units with 1 kHz step size. This product guide is a quick “snap shot” of what is currently offered in our extensive synthesizer product line. For more detailed synthesizer specifications and new products, visit our web-site at [www.microlambdawireless.com](http://www.microlambdawireless.com)

### 2-20 GHz Synthesizer Test Box MLBS-Series



MLBS Series Bench Test Synthesizers are available covering 2 GHz to 20 GHz. They are ideal for production test sets, lab tests and test equipment racks where generation of microwave signals are essential. Units are simply plugged into a standard electrical outlet and you are ready to go.

Standard models cover the 2-8 GHz, 8 to 20 GHz and 2 to 20 GHz frequency bands. All versions of the MLSP synthesizer family can be easily inserted into the test box. Tuning consists of a control knob, key pad, USB and Ethernet connections. Units provide +10 dBm to +13 dBm output power levels and are specified over the lab environment of +15°C to +55°C and are CE certified.

Units are provided with a power cord, USB cable, Ethernet cable, CD incorporating a user manual, quick start guide and PC interface software.

### 2-20 GHz PXI and Compact PXI sized Wideband Frequency Synthesizers MLSP-Series



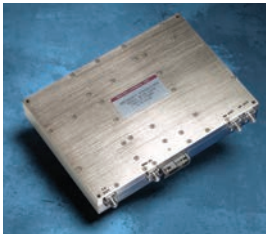
Covering frequency ranges of 2-20 GHz, 8-20 GHz, 6-18 GHz, 2-8 GHz and 600 MHz to 2.5 GHz. This series of synthesizers reduce the current synthesizer size while also providing low phase noise performance. Units can be provided with internal, external or both crystal references. 1 KHz frequency resolution is standard. Tuning is accomplished via 5 line serial or standard USB control. +8 dBm to +13 dBm RF power levels are provided depending on frequency band with an option for power leveling (-20dB) and/or a fixed level RF output.

**Options include:**

- Special RF Reference Input frequencies available covering 1–200 MHz.
- RF output power leveling (-20dB).
- RF connector location (side or front).
- USB frequency control.

## .6-3 GHz, 2-10 GHz & 6-13 GHz Frequency Synthesizers for Test and Measurement

### MLSW-Series



These frequency synthesizers covering wideband frequencies in the 600 MHz to 16 GHz band, out perform most test equipment signal generators available today. Extremely low phase performance over .6-3 GHz, 2-8 GHz, 2-10 GHz, and 6-13 GHz is available as standard products. Units utilize a 10 MHz external reference and provide 1 Hz frequency resolution. +10 to +12 dBm RF power output levels are provided.

**Options include:**

- Special RF Reference Input Frequencies covering 5-100 MHz
- 2nd L.O. Frequencies covering VCO bands in the 500 MHz to 4 GHz range with 1 MHz step size.
- Dual RF Outputs.
- Analog Sweep.
- 1,000 Pre-Set Frequency Points.
- RS-232, 422 & 485 Interface Converters available.

## Narrowband Frequency Synthesizers Covering 2-16 GHz for Satcom and Telecom Applications

### MLSN-Series



These narrow band synthesizers covering 2 GHz and 3 GHz tuning ranges over the 2-16 GHz frequency range, provide excellent phase noise performance for those difficult frequency converter designs. Units provide 1 Hz frequency resolution while using an industry standard 10 MHz reference input. +13 dBm to +10 dBm is provided depending on frequency band.

**Options include:**

- Special RF Reference Input Frequencies covering 5 -100 MHz.
- 2nd L.O. Frequencies covering VCO bands in the 500 MHz to 4 GHz range with 1 MHz step size.
- Dual RF Outputs.
- Analog Sweep.
- 1,000 Pre-Set Frequency Storage Points.
- RS-232, 422 & 485 Interface Converters available.

## 2 GHz & 3 GHz Tuning Band Synthesizers covering the 2 GHz to 12 GHz Frequency Range for Digital Radio and General Applications

### MLSL-Series



These low cost frequency synthesizers offer 2 GHz and 3 GHz tuning ranges in the 2-12 GHz frequency band. Standard units offer 500 kHz step size with optional step sizes down to 100 kHz. Excellent phase noise performance is offered at frequency offsets greater than 10 kHz off the carrier. Units are controlled by three wire serial interface. Size is 2.5" x 2.5" x 1.0". Small size and low cost make these frequency synthesizers ideal for Digital Radios and a host of general applications.

**Options include:**

- Optional tuning step sizes, down to 100 kHz.
- Dual RF Outputs. (DO option).
- Internal Crystal Reference. (IC option).
- Non-Volatile Memory.



Micro Lambda Wireless was founded with the purpose of supplying the microwave community with technically superior products at reasonable prices with the highest regard to customer service and quality. Products include YIG oscillators, YIG bandpass & band reject filters, frequency multipliers, phased locked sources and frequency synthesizers.

Micro Lambda Wireless is the largest independent supplier of YIG components in the world! Over 20,000 YIG-based components and assemblies delivered annually.

For additional information on Micro Lambda Wireless, please contact the factory or one of our regional sales offices.

[www.microlambdawireless.com](http://www.microlambdawireless.com)



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