

## 2014 YIG-Tuned Oscillators



## MicroLambda Wireless YIG Tuned Oscillators

Micro Lambda Wireless offers the largest YIG-Tuned Oscillator product line in the market today. Designs covering frequency ranges from 500 MHz to 44 GHz in either narrow band or wide band configurations are available in the standard product offerings. Permanent Magnet designs covering the 2 GHz to 20 GHz fundamental ranges, through 44 GHz using frequency doublers and Electromagnetic designs covering the 500 MHz to 40 GHz ranges in octave and multi-octave configurations. Power Output levels range from 0 dBm up to +23 dBm depending on frequency band and configuration. RF output connector options range from SMA-Female, SMA-Male, GPO and various Output Pin sizes for various PC Board mounting configurations including direct surface mount configurations. Electrical specifications can be tailored to customer specific requirements and most oscillator configurations will meet both the commercial and military temperature ranges and environments. This product guide is a quick “snap shot” of what is currently offered in our extensive oscillator product line. For more detailed oscillator specifications and new products, visit our web-site at [www.microlambdawireless.com](http://www.microlambdawireless.com)

### 2-13 GHz Surface Mount YIG-Tuned Oscillators



New series of surface mount permanent magnet oscillators are now available in production quantities. Extremely small size, excellent phase noise and good frequency stability make these oscillators the perfect choice for next generation, PXI, compact PCI, synthesizers and general applications. Units operate with low DC voltage and do not require a heater. A test fixture is also available for prototyping and testing.

Product	Frequency	Size/Height	Description
<b>MLSMO-Series</b>	2-13 GHz	.7 x .7 x .562 in	PMO, Surface Mount
<b>MLOTF-1000</b>	All	1.5 x 1.5 x .874 in	Test Fixture

### 2-13 GHz TO-8 YIG-Tuned Oscillators



Two series of TO-8 oscillators, permanent magnet and electro magnetic are now available in production quantities. Extremely small size, excellent phase noise and good frequency stability make these oscillators the perfect choice for next generation, PXI, compact PCI, synthesizers and general applications. Units operate with low DC voltage and do not require a heater.

Product	Frequency	Size/Height	Description
<b>MLTO-Series</b>	2-13 GHz	.5 in	PMO, PCB Plug-in
<b>MLTO-Series</b>	2-13 GHz	.35 in	PMO, PCB Plug-in
<b>MLTO-Series</b>	2-8 GHz	.27 in	PMO, 2 GHz wide PCB Plug-in
<b>MLTM-Series</b>	2-13 GHz	.5 in	Mini, PCB Plug-in
<b>MLTM-Series</b>	2-13 GHz	.35 in	Mini, PCB Plug-in

### 2-20 GHz Permanent Magnet YIG-Tuned Oscillators



These series of permanent magnet YIG-Tuned oscillators offer 2 GHz and 3 GHz tuning over the 2-20 GHz frequency band. Miniature size and excellent phase noise performance make these oscillators a good choice for narrow band applications. PC Board, PCI, PXI, VME & VXI sizes are available throughout the product line. Low prime power is a major advantage over traditional Electro-magnetic oscillator designs. Commercial and extended temperature range models are available throughout the product line.

Product	Frequency	Description
<b>MLPB-Series</b>	2-8 GHz	Plug-In Board Designs
<b>MLPF-Series</b>	2-20 GHz	Fixed Frequency- Bipolar and FET designs
<b>MLPM-Series</b>	2-14 GHz	Bipolar based designs
<b>MLPM-Series</b>	9-20 GHz	FET based designs
<b>MLPW-Series</b>	8-22 GHz	4 GHz Tuning Range
<b>MLPX-Series</b>	16-40 GHz	MLPW-Series with Frequency Doublers

## 700 MHz - 8 GHz Electromagnetic Mini YIG-Tuned Oscillators



These electromagnetic tuned oscillators utilize a traditional magnetic structure to generate the required wide band frequency ranges over the 700 MHz to 8 GHz band. PC Board, PCI, PXI, VME & VXI sizes (1" x 1" x .5") are also available in these oscillator series. Excellent phase noise performance is offered over the 3-6 GHz band of -130 dBc/Hz at 100 kHz offset. Commercial and extended temperature range models are available throughout the product line.

Product	Frequency	Description
<b>MLMB Series</b>	2 GHz to 8 GHz	Plug-In Board, Wide Band Configurations
<b>MLMY-Series</b>	700 MHz to 8 GHz	Wide Band Configurations
<b>MLMH-Series</b>	2 GHz to 8 GHz	Fast Tune Models, Octave & Wide Band Configurations

## 700 MHz to 20 GHz Standard Configuration Yig-Tuned Electromagnetic Oscillators



Industry standard 1" cube, 1.25" cube and 1.75" cylinder package styles are offered in these series oscillators. Narrowband, Octave Band and Multi Octave band configurations dominate this series. Up to +15 dBm power levels are standard with up to +20 dBm on some model types available. Low noise models are available depending on frequency band. Commercial and extended operating temperatures are available depending on configuration.

Product	Frequency	Description
<b>MLOM-Series Octave Bands</b>	1 GHz to 18 GHz	1" Cube
<b>MLOM-Series Multi Octave Bands</b>	700 MHz to 18 GHz	1" Cube
<b>MLOB-Series Octave Bands</b>	1 GHz to 20 GHz.	1.25" Cube
<b>MLOB-Series Multi Octave Bands</b>	700 MHz to 20 GHz	1.25" Cube
<b>MLOS-Series Octave Bands</b>	1 GHz to 20 GHz	1.75" Cylinder
<b>MLOS-Series Multi Octave Bands</b>	700 MHz to 20 GHz	1.75" Cylinder
<b>MLOS-P Series</b>	Wide Band, 2-20 GHz Low Noise	Various sizes
<b>MLXS-T Extreme Series</b>	Wide Band, 2-18 GHz, 2-20 GHz & 2-26.5 GHz	2" Cylinder
<b>MLXM-Extreme Series</b>	Low Noise, 6-18 GHz & 8-18 GHz	1" Cube
<b>MLXB-Extreme Series</b>	Low Noise, 6-18 GHz, 8-18 GHz, 8-20 GHz	1.25" Cube
<b>MLXS-Extreme Series</b>	Low Noise, 6-18 GHz, 8-18 GHz, 8-20 GHz	1.75" Cube

## 18 GHz to 40 GHz Millimeter Wave Electromagnetic YIG-Tuned Oscillators



Micro Lambda Wireless offers a wide range of Millimeter fundamental oscillators. Packaged in 2" cylinder sizes, they offer wide band frequency coverage up to 40 GHz. High RF output power of up to +17 dBm is available depending on frequency band.

Product	Frequency			Description
<b>MLOS-Series</b>	17-24 GHz	18-26.5 GHz	12-26.5 GHz	2" Cylinder
<b>MLOS-40 GHz Series</b>	20-40 GHz	26.5-40 GHz	18-40 GHz	2" Cylinder

## Standard Driver Configurations for YIG-Tuned Oscillators, Analog, TTL Digital & Serial Interfaces/Commercial & Military



All Micro Lambda Oscillators (except PC Board & Fast Tuned versions) are available with integrated driver interfaces. Integrating an oscillator with a driver at the factory insures operating temperature performance prior to shipment. It precludes the need for customers to design their own driver circuits and integrate themselves. In many cases this insures maximum performance out of the oscillator component and driver. Commercial and Military driver versions are available for most products. See our extensive driver listings in our catalog or on-line at our web-site: [www.microlambdawireless.com](http://www.microlambdawireless.com)



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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