

Quick Fact Sheet

EcoSyn™ Lite MG36021A

Microwave Frequency Synthesizer Module

10 MHz to 20 GHz



Anritsu's EcoSyn Lite MG36021A is a RF/Microwave frequency synthesizer module capable of generating CW output from 10 MHz to 20 GHz. With outstanding phase noise, ultra-fast switching speed, and a small form factor, EcoSyn Lite MG36021A is an ideal signal source.

- For testing RF/mmWave components and subsystems in production
- As a portable signal source for quick functional testing
- As a LO source with low phase noise for up/down converters
- As a low jitter clock source for Gbit ADC/DACs and in high speed optical systems
- As a CW signal source in RF/Microwave subsystems that require fast switching speed

EcoSyn Lite's phase noise performance of -124 dBc/Hz (typical) at 10 GHz and 10 kHz offset is one of the best in its class. Along with non-harmonic spurious of -60 dBc, EcoSyn Lite can be used as a clock source with low jitter for Gbit ADC/DAC testing and in high speed optical systems.

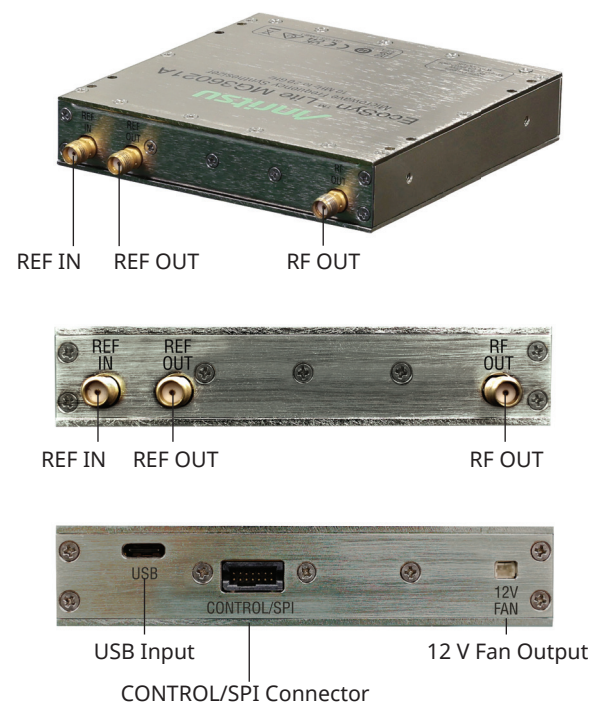
EcoSyn Lite's low phase noise both at close in and far off offsets and its robust output power of $+18$ dBm makes it ideal for use as LO for up/down converters in RF/microwave transceivers. These transceivers increasingly use complex and high order modulation signals which require LO's with very low phase noise for up/down conversion.

EcoSyn Lite offers ultra-fast frequency switching time of less than 50 μ Sec. Fast frequency switching speed saves testing time in production test environments. Additionally, EcoSyn Lite supports standard SCPI and QuickSyn™ native commands which make developing scripts to remotely control and automate very easy and user friendly.

EcoSyn Lite synthesizer module is housed in portable, compact 4 in x 4 in x 0.8 in form factor which enables it to be used in space constrained applications which require instrumentation grade CW signal source. It supports USB and SPI interfaces for remote control and is powered using a $+12$ V DC source.

Key Features

- Very Low Phase Noise
- Ultra-fast Frequency Switching Speed
- Robust Output Power
- Very Small Form Factor
- SCPI and QuickSyn Native Command Support
- Step and List Sweep Modes



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Key Specifications

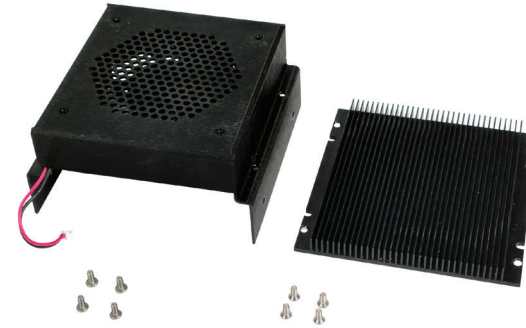
Performance	
Frequency Range	10 MHz to 20 GHz
Frequency Resolution	0.001 Hz
SSB Phase Noise	-126 dBc/Hz (typical) at 10 GHz and 10 kHz Offset
Harmonics	-10 dBc (nominal)
Non-Harmonics	-60 dBc
Frequency Switching Time	50 μ Sec (List mode)
Max Output Power	+18 dBm @ 20 GHz
Level Accuracy	± 1.5 dB
Reference In/Out	10 MHz
Input Power	+12 VDC

Standard Accessories

Part Number	Description
40-187-R	AC/DC Power Supply, 1-meter, 12 V output cable
2100-43-R	Development Cable
2000-1859-R	USB 3.0 Type-C to Type-A Cable

Optional Accessories

Part Number	Description
2000-2180-R	Cooling Assembly Kit



2000-2180-R
Cooling Assembly Kit



40-187-R
Power Block



2000-1859-R
USB 3.0 Type-C to Type-A Cable



2100-43-R
Development Cable