

Synthesizer, 1400-1600 MHz, 12dBm, 12Volts

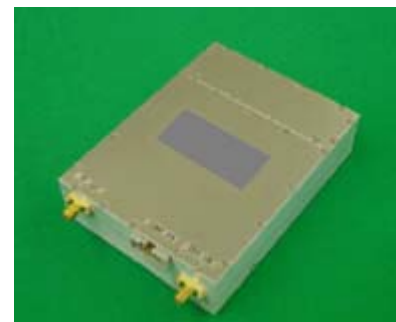
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1kHz Step Size, SMA Female Connectors, 10 MHz External Reference

Variable Frequency: 1400-1600 MHz, 1 Hz step size

RSYNTH-L504-1400-1600M-1Hz-Sf-12d12v-ER10M-L1

Raditek's L504 Series is a state-of-art, wideband digital frequency synthesizer. The extremely low phase noise exceeds the requirements for applications to modern Microwave Communications. The unit has been specially designed and developed for high-density digital modulation applications. A 10 MHz input reference is used. One hertz resolution with extremely low phase noise at less than -140 dBc /Hz, at 1 MHz offset. One Hertz resolution step is controlled by a DDS. A special dual Phase Lock Loop design, with two types of high performance VCO's, adapted to achieve the superior performance.



Order Examples: RSYNTH-L504-1400-1600M-1Hz-Sf-12d12v-ER10M-L1

Electrical Performance		Units
Frequency Range :	1400~1600	MHz
Frequency Resolution	Step=1	Hz
Output Power :	+12dBm ±2dB @50 ohm	dBm
RF Output Power, off conditions	-20	dBm Max.
SSB Phase Noise		
• 10Hz offset	≤ -75	dBc/Hz Max
• 100 Hz offset :	≤ -90	dBc/Hz Max
• 1 KHz offset :	≤ -100	dBc/Hz Max
• 10 KHz offset :	≤ -100	dBc/Hz Max
• 100 KHz offset :	≤ -110	dBc/Hz Max
• 1 MHz offset :	≤ -140	dBc/Hz Max
Spurious:		
• Harmonics	≤ -20	dBc Max
• Non-Harmonics (F>100 Hz)	≤ -65	dBc Max
External Reference In.		
• Frequency	10	dBm
• Level	+0 ±3	dBm @50 ohm
• Phase Noise	< -140	dBc/Hz offset
Control	3 Wire Serial TTL Binary 29 Bits Clock, Data and Enable	
Alarm Out		
• Lock :	TTL-Hi	
• Un-Lock :	TTL-Lo	
Lock up Time	≤ 300	msec max

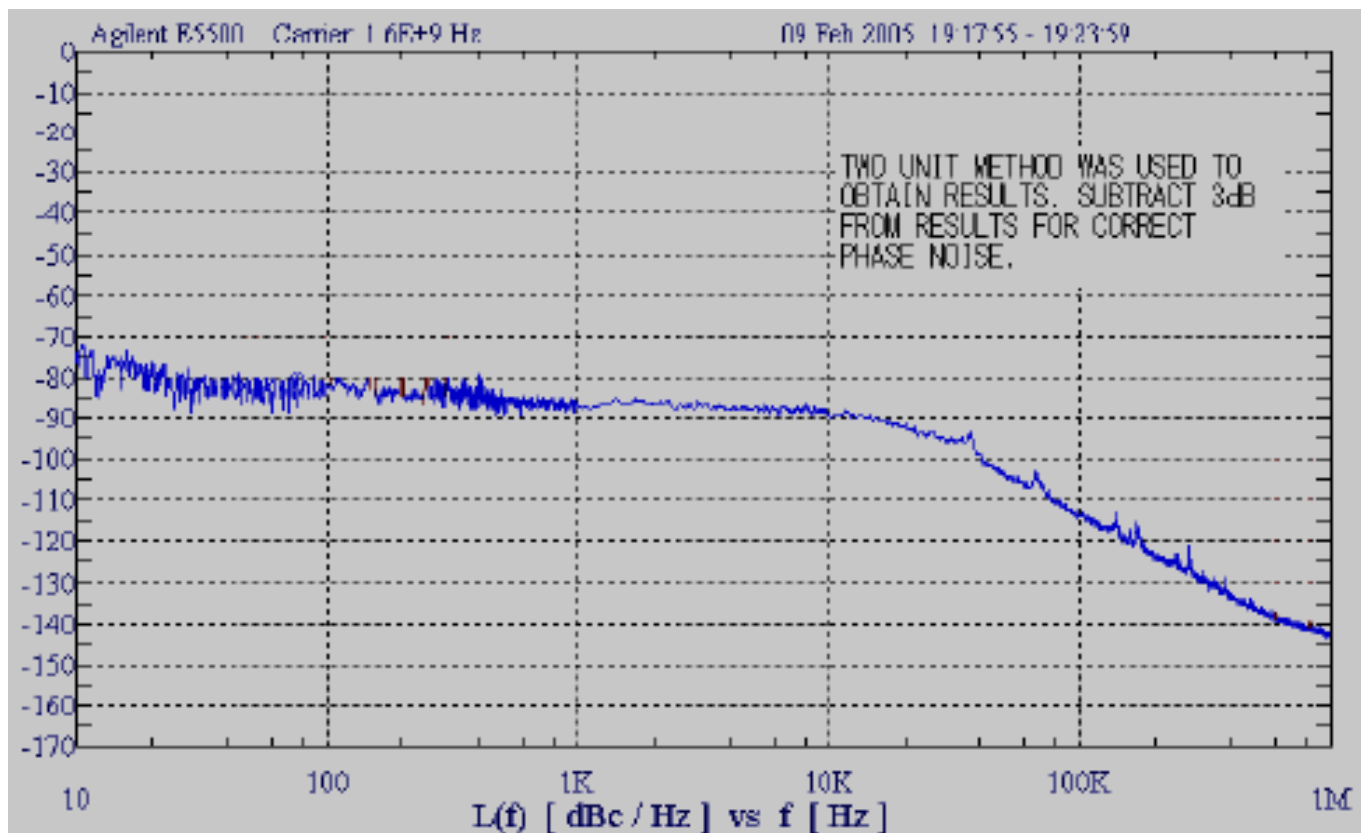
ROHS Compliant

RADITEK INC.

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1kHz Step Size, SMA Female Connectors, 10 MHz External Reference
Variable Frequency: 1400-1600 MHz, 1 Hz step size
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Electrical Performance		Units
Power Supply	+12 V \pm 0.5 V @300	DC mA Max
Environmental Conditions		
• Storage Temperature Range	Normally:0 to +50 -20 ~ +70 optional	°C
• Guarantee Operating	-30 ~+70	°C
Package Connectors		
• Dimensions	90x120x29	mm
• Weight	130	g Max.
• Connectors RF Control	SMA (F)	
• DC- Bias	3M7610-5002FL,10pin (Protected Dual row 0.1 in. Header)	



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Specifications may be subject to change

11/14/08

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