SLS2 SERIES FREQUENCY SYNTHESIZER

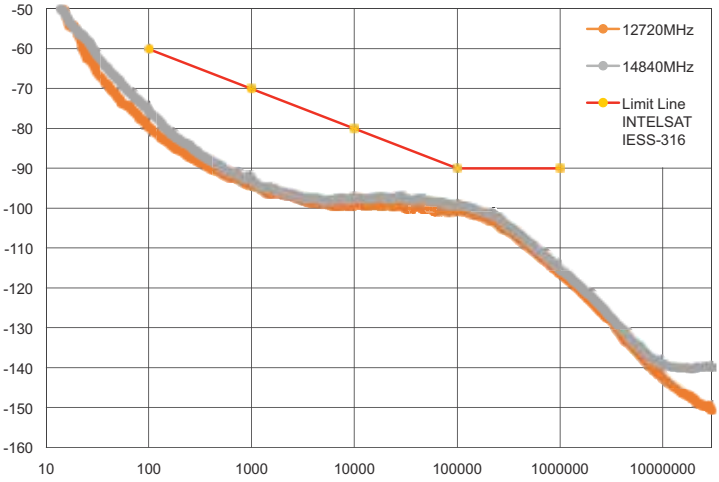
0.010 GHz to 15 GHz (IN BANDS)
Extended Bands to 20.0 GHz

SPECIFICATION	
Output frequency range capabilities	0.010 GHz to 15 GHz (In Bands)
Examples of standard frequency bands (Contact factory for custom frequency bands)	1 GHz to 2 GHz 2 GHz to 4 GHz 3 GHz to 6 GHz 4 GHz to 8 GHz 9 GHz to 11 GHz 10.405 GHz to 11.450 GHz 11.450 GHz to 12.570 GHz 12.720 GHz to 14.840 GHz Multioctaves also available
Step size	1 kHz (custom step sizes available)
Output power	+13 dBm minimum
Output power variation	± 2 dBm
Output harmonic in narrow band	-20 dBc maximum
Output harmonic in octave bandwidths	-15 dBc maximum
Subharmonics for 15 GHz to 19 GHz bands	-10 dBc maximum
Output spurious	-60 dBc maximum
Phase noise	See graph
Input reference frequency Standard 10 MHz custom	10 MHz (Custom reference frequencies available from 1 MHz to 200 MHz). Also available is programmable varying reference.
Input reference power level	0±3 dBm
Input impedance	50 ohms
Load VSWR	1.5:1 nominal
DC power requirements	+7 volts to +24 volts at 3.5 W typical, 4 W maximum Single rail supply
Phase lock alarm	TTL High in lock, low out of lock
Frequency control	Serial RS-422 (4 wire) or USB

PHASE NOISE SPECIFICATIONS (dBC/Hz), typical	OFFSET (Hz)						
	10	100	1K	10K	100K	300K	1M
12700 MHz	-42	-77	-94	-99	-100	-105	-116
14840 MHz	-42	-75	-92	-97	-98	-104	-115

Narda-MITEQ's SLS2 series of high spectral purity synthesizers offer a low price alternative for L, S, C and Ku-bands with the lowest phase noise. With standard 1 kHz step size output at all bands the SLS2 series synthesizers are ideal for dual conversion up and down converters. With +13 dBm output power and 60 dBc spurious suppression, the SLS2 series support the most stringent system applications. Consuming less than 4 Watt maximum from (+7 to 28 V) DC supply.

PHASE NOISE SPECIFICATIONS
PHASE NOISE CHARACTERISTICS



ORDERING INFORMATION

SLS2 – □□.□□□ – □□.□□□ – □□□ K – □□□ *M – □□ P

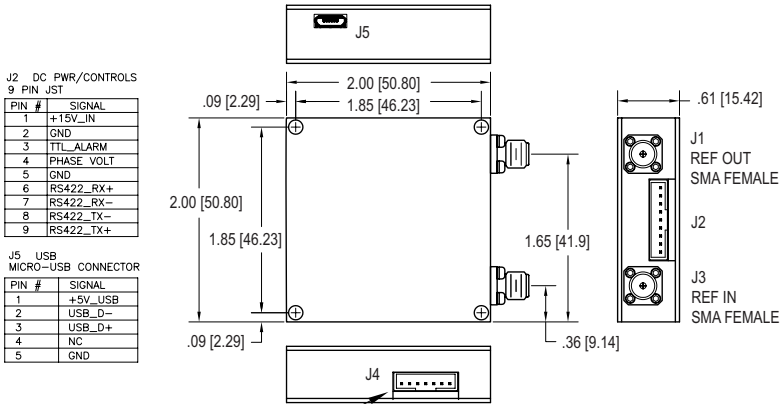
- Series
- Start Frequency GHz
- Stop Frequency GHz
- Step Size
- M (MHz), K (KHz) or H (Hz)
- Reference Frequency MHz or I (Internal) *Remove M
- Positive D.C. Supply Voltage (7 to 24)

* Internal Reference Ex: Part Number SLS2-2.00-4.00-1k-I-8P. Covers 2.0 to 4.0 GHz with a step size of 1kHz, has an internal reference and +8Volt supply.

EXAMPLE: Part Number SLS2-12.70-14.48-1K-10M-8P part number for frequency synthesizer covering 12.72 GHz to 14.48 GHz with a step size of 1 kHz and a reference frequency of 10 MHz with +8 volts D.C. supply voltage.

NOTE: Use only character length necessary

OUTLINE DRAWING 218213



J4 For Narda-MITEQ use only.

NOTE: Dimensions shown are in inches and these shown in brackets [] are in millimeters.

KEY FEATURES

- Low cost
- 10 dB below INTELSAT phase noise mask
- Ideal for use in dual conversion up and down converters
- 1 kHz standard step size
- Available in octave wide bands
- Built in reference cleanup or internal reference
- Low G sensitivity

OPTIONS

- Custom frequency bands
- Custom step sizes
- High ouput power options

GENERAL SPECIFICATIONS

MECHANICAL SPECIFICATIONS	
Outline drawing	218213
Size	2.0” x 2.0” x 0.61”
Weight	≤ 100 grams
RF connectors	SMA female
DC connectors	9-pin JST™ (mating connector PHR-9 or equivalent)

ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE	
Operating	-40 °C to +80 °C
Storage	-50 °C to +100 °C
Humidity	95% at 40 °C non-condensing
Shock (survival)	30 g’s, 10 ms pulse
Vibration (survival)	20 Hz to 2000 Hz random to 4 g’s rms
G-sensitivity	1.5 PPb/g (worst axis)

SLS2 Series Frequency Synthesizer

Narda-MITEQ is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers’ mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.

narda MITEQ
435 Moreland Road
Hauppauge, NY 11788
t 631.231.1700 | f 631.231.1711
componentsnm@nardamiteq.com