

SLS2 SERIES



0.010 GHz to 15 GHz (IN BANDS)



FEATURES

- 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

OPTIONS

- Low cost
- Custom frequency bands
- External reference cleanup
- Custom step sizes
- Minature packaging

L3 Narda-MITEQ's SLS2 series of high spectral purity synthesizers offer a low price alternative for Ku-band INTELSAT satellite communications applications offering 10 dB below INTELSAT phase noise mask. With standard 1 kHz step size output at Ku-band, 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 will support the most stringent system applications. Low power dissipation leads to higher MTBF.



SLS2 SERIES

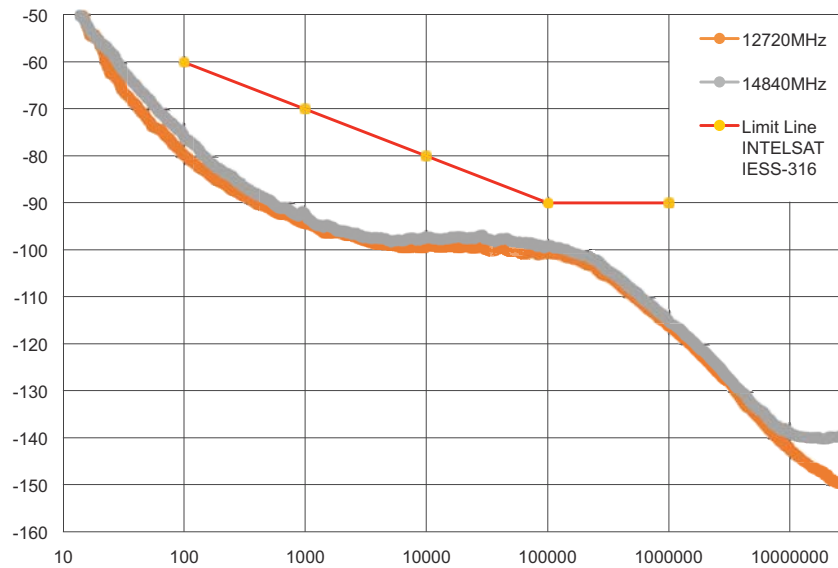
SPECIFICATIONS	UPCONVERTERS
Output frequency range capabilities	0.010 GHz to 15 GHz (In Bands)
Examples of standard frequency bands (Contact factory for custom frequency bands)	1 GHz to 2 GHz 1 GHz to 2 GHz 2 GHz to 4 GHz 3 GHz to 6 GHz 4 GHz to 8 GHz 9 GHz to 11 GHz 10.405 GHz to 11.450 GHz 11.450 GHz to 12.570 GHz 12.720 GHz to 14.840 GHz
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
Output spurious	-60 dBc maximum
Phase noise	See graph
Input reference frequency	10 MHz (Custom reference frequencies available from 1 MHz to 200 MHz. Also available is programmable varying reference. This allows the ability to change from 5 MHz to 10 MHz with a simple command)
Input reference power level	0±3 dBm
Input impedance	50 ohms
Load VSWR	1.5:1 nominal
DC power requirements	+6.5 volts to +28 volts at 400 mA maximum Single rail supply
Phase lock alarm	TTL High in lock, low out of lock
Frequency control	Serial RS-422 (4 wire) USB

PHASE NOISE SPECIFICATIONS (dBc/Hz)	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



PHASE NOISE SPECIFICATIONS

PHASE NOISE CHARACTERISTICS



GENERAL SPECIFICATIONS

MECHANICAL SPECIFICATIONS

Outline drawing 218212
Size 2.0" x 2.0" x 0.61"
Weight ≤ 100 grams
RF connectors SMA female
DC connectors..... 9-pin JST™

ENVIRONMENTAL SPECIFICATIONS

Temperature
Operating..... -40 °C to +80 °C
Storage -50 °C to +100 °C
Humidity 95% at 40 °C noncondensing
Shock (survival) 30 g's, 10 ms pulse
Vibration (survival) 20 Hz to 2000 Hz
random to 4 g's rms

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OUTLINE DRAWING

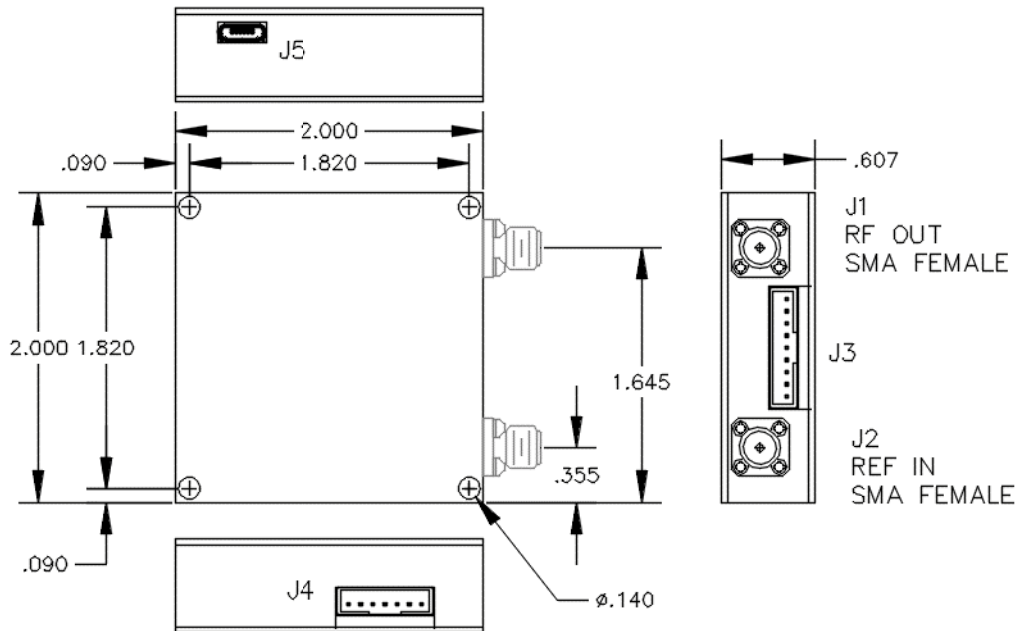
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J3 DC PWR/CONTROLS
9 PIN JST

PIN #	SIGNAL
1	+VCC_IN
2	GND
3	TTL_ALARM
4	PHASE_VOLT
5	GND
6	RS422_RX+
7	RS422_RX-
8	RS422_TX-
9	RS422_TX+

J5 USB
MICRO-USB CONNECTOR

PIN #	SIGNAL
1	+5V_USB
2	USB_D-
3	USB_D+
4	NC
5	GND



Note: Dimensions shown are in inches and those shown in brackets [] are in millimeters.

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