Norsat International Inc.

Innovative Communication Solutions

7100HTAN

7000 Triple-Band Ka-Band PLL LNB

Frequency: A: 17.70 - 18.70 GHz | 18.45 - 19.45 GHz | 19.20 - 20.20 GHz

L.O. Stability: +/- 10 kHz

Output Connector: N: 50 Ohm

KEY SPECIFICATIONS

Band	Ka-Band
Input Frequency Band 1	17.70 - 18.70 GHz
Input Frequency Band 2	18.45 - 19.45 GHz
Input Frequency Band 3	19.20 - 20.20 GHz
LO Frequency 1	16.75 GHz
LO Frequency 2	17.50 GHz
LO Frequency 3	18.25 GHz
LO Stability	±10 kHz
LO Type	PLL
Noise Figure Max	1.5 dB
Noise Figure Typ	1.3 dB
Number Of Onboard Los	Triple-Band
Output Frequency Band 1	950 - 1950 MHz
Output Frequency Band 2	950 - 1950 MHz
Output Frequency Band 3	950 - 1950 MHz
Tone Frequency	22 kHz ± 4 kHz

RF SPECIFICATIONS

Control Signal 1	13V / No Tone
Control Signal 2	13V / 22kHz Tone
Control Signal 3	18V / No Tone
Conversion Gain Max	65 dB
Conversion Gain Min	55 dB

Conversion Gain Typ	60 dB
Gain Flatness (over Full Band)	≤ 5 dB p-p max.
Input VSWR	2.5 : 1 max.
Output P1db	+ 5 dBm min.

ELECTRICAL SPECIFICATIONS

Current Consumption	450 mA max
Power Requirements	+12 to +24V DC

INTERFACE SPECIFICATIONS

IF Connector	N-Connector
RF Input Connector	WR-42 Waveguide Grooved

ENVIRONMENTAL SPECIFICATIONS

Humidity	0 - 100%
IP Rating	IP 66
Temperature Operational	-40°C to +70°C
Temperature Storage	-45 to +80˚C

PHYSICAL SPECIFICATIONS

Product Height	1.70 in
Product Length	4.67 in
Product Weight	0.4 kg
Product Width	1.72 in

LOGISTICS SPECIFICATIONS

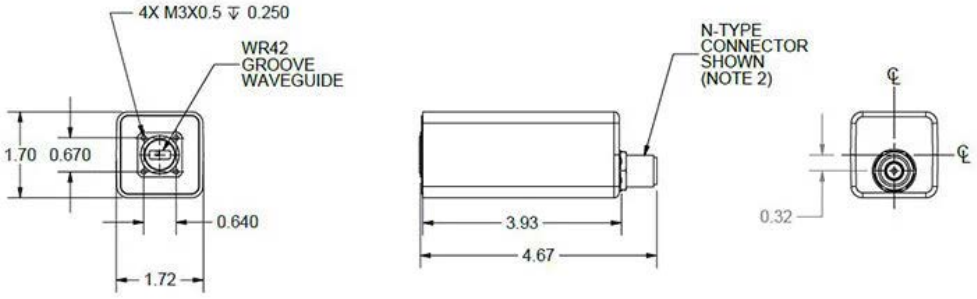
HS Code	Country of Origin	Ex Works	ECCN Number	Unit Package
	Made in Canada	Richmond, BC, Canada	EAR99	135 mm x 68 mm x 48 mm | 0.48 kg

HOW TO ORDER

7200HSAF

CONNECTOR	**F -** 75 Ohm **N -** 50 Ohm
FREQUENCY	**A / B / C / D / E** (Please see next page for frequency bands)
BAND	**S:** Single-Band **D:** Dual-Band **T:** Triple-Band **U:** Quad-Band **P:** Five-Band
REFERENCE	**H:** Internal Reference **X:** External Reference
L.O. STABILITY	**0:** External Reference only **1:** ±10 kHz **2:** ±25 kHz **5:** ±50 kHz
LNB SERIES #	

MECHANICAL DIAGRAMS



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Dual Band			
Band	RF freq. (GHz)		Voltage/Tone
A	Band 1	17.75 - 18.75	13 V
	Band 2	18.35 - 19.35	18 V
B	Band 1	18.20 - 19.20	13 V
	Band 2	19.20 - 20.20	18 V
C	Band 1	18.40 - 19.40	13 V
	Band 2	19.20 - 20.20	18 V
D	Band 1	19.20 - 20.20	13 V
	Band 2	20.20 - 21.20	18 V
E	Band 1	17.20 - 18.20	13 V
	Band 2	17.50 - 18.50	18 V

Triple Band			
Band	RF Freq. (GHz)		Voltage/Tone
A	Band 1	17.70 - 18.70	13 V
	Band 2	18.45 - 19.45	13 V / 22 kHz
	Band 3	19.20 - 20.20	18 V
B	Band 1	17.70 - 18.70	13 V
	Band 2	18.70 - 19.70	13 V / 22 kHz
	Band 3	19.70 - 20.20	18 V
C	Band 1	17.90 - 18.30	13 V
	Band 2	18.30 - 19.30	13 V / 22 kHz
	Band 3	19.30 - 20.30	18 V
D	Band 1	18.20 - 19.20	13 V
	Band 2	19.20 - 20.20	13 V / 22 kHz
	Band 3	20.20 - 21.20	18 V
E	Band 1	17.50 - 18.50	13 V
	Band 2	18.20 - 19.20	13 V / 22 kHz
	Band 3	19.20 - 20.20	18 V

Quad Band			
Band	RF Freq. (GHz)		Voltage/Tone
A	Band 1	17.20 - 18.20	13 V
	Band 2	18.20 - 19.20	13 V / 22 kHz
	Band 3	19.20 - 20.20	18 V
	Band 4	20.20 - 21.20	18 V / 22 kHz
B	Band 1	17.50 - 18.50	13 V
	Band 2	18.40 - 19.40	13 V / 22 kHz
	Band 3	19.30 - 20.30	18 V
	Band 4	20.20 - 21.20	18 V / 22 kHz

Five Band			
Band	RF Freq. (GHz)		Voltage/Tone
A	Band 1	17.20 - 18.20	13 V
	Band 2	18.00 - 19.00	13 V / 22 kHz
	Band 3	18.70 - 19.70	18 V
	Band 4	19.40 - 20.40	18 V / 22 kHz
	Band 5	20.30 - 21.30	24 V

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