Norsat International Inc.

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C-Band / KU-Band LNBs

3120N

CONNECTOR	F - 75 Ohm N - 50 Ohm
NOISE TEMPERATURE	20 - 20 K 25 - 25 K 30 - 30 K
L.O. STABILITY	4 - 0.4 ppm - ±2 kHz 6 - 0.6 ppm - ±3 kHz 8 - 0.8 ppm - ±4 kHz 1 - 1.0 ppm - ±5 kHz 2 - 2.0 ppm - ±10 kHz 5 - 5.0 ppm - ±25 kHz
LNB SERIES #	

3120CN

CONNECTOR	F - 75 Ohm N - 50 Ohm
INPUT FREQUENCY	3.625 - 4.2 GHz
NOISE TEMPERATURE	20 - 20 K 25 - 25 K
L.O. STABILITY	1 - 1.0 ppm - ±5 kHz 2 - 2.0 ppm - ±10 kHz 3 - 5.0 ppm - ±25 kHz
LNB SERIES #	

3000 Series C-Band PLL High Stability

FREQUENCY BANDS AVAILABLE

Input Frequency (GHz)	3.40 to 4.20
L.O. Frequency (GHz)	5.15
Output Frequency (MHz)	950 to 1750

TYPICAL SPECIFICATIONS

Noise Temperature	20K to 30K depending on model number
L.O. Stability	±2 kHz to ±25 kHz
(over temperature excl offset)	depending on model number
Phase Noise	-73 dBc/Hz at 1kHz
(SSB)	-83 dBc/Hz at 10kHz -93 dBc/Hz at 100kHz
Input VSWR	2.2 : 1
Output VSWR	2.2 : 1
Conversion Gain	62 dB
Output P1dB	9 dBm
Power Requirements	+15 to +24 V supplied through center conductor of IF cable
Current Drain	330 mA
Input Waveguide	CPR229G
Dimensions	144 (L) x 70 (W) x 98 (H) mm (5.7 x 2.8 x 3.9 in)
Weight	500 g / 17.6 oz
Temperature Range	-40°C to +60°C
Relative Humidity	0 - 100% condensing

3000C Series C-Band PLL High Stability

FREQUENCY BANDS AVAILABLE

Input Frequency (GHz)	3.625 to 4.20
L.O. Frequency (GHz)	5.15
Output Frequency (MHz)	950 to 1525

TYPICAL SPECIFICATIONS

Noise Temperature	20 K, 25 K
L.O. Stability	±5 kHz, ±10 kHz, ±25 kHz
(over temperature excl offset)	depending on model number
Phase Noise (SSB)	-73 dBc/Hz at 1 kHz -83 dBc/Hz at 10 kHz -93 dBc/Hz at 100 kHz
Input VSWR	2.2 : 1
Output VSWR	2.2 : 1
Conversion Gain	62 dB
Output P1dB	9 dBm
Power Requirements	+12 to +24 V supplied through center conductor of IF cable
Current Drain	330 mA
Input Waveguide	CPR 229G
Dimensions	180 (L) x 100 (W) x 70 (H) mm (7.1 x 4.0 x 2.8 in)
Weight	425 g / 15 oz
Temperature Range	-40°C to +60°C

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C-Band / KU-Band LNBs

1000H Series KU-Band PLL

FREQUENCY BANDS AVAILABLE

Typical Service	1000HA	1000HB	1000HC
Input Frequency (GHz)	11.70 to 12.20	12.25 to 12.75	10.95 to 11.70
L.O. Frequency (GHz)	10.75	11.30	10.00
Output Frequency (MHz)	950 to 1450	950 to 1450	950 to 1700

TYPICAL SPECIFICATIONS

Noise Figure	0.7 to 0.9 dB depending on model number
L.O. Stability (over temperature excl. offset)	±10 kHz to ±25 kHz (See HS1000 for < 5 kHz L.O. stability)
Phase Noise (SSB)	-75 dBc/Hz at 1 kHz -80 dBc/Hz at 10 kHz -95 dBc/Hz at 100 kHz
Input VSWR	2.2 : 1
Output VSWR	2.2 : 1
Conversion Gain	60 dB
Output P1dB	5 dBm
Power Requirements	+15 to +24 V supplied through center conductor of IF cable
Current Drain	200 mA
Input Waveguide	WR75
Dimensions	110 (L) x 42 (W) x 42 (H) mm (4.3 x 1.7 x 1.7 in)
Weight	300 g / 10.6 oz
Temperature Range	-40°C to +60°C

1208HAF

CONNECTOR	F - 75 Ohm N - 50 Ohm
FREQUENCY	A - 11.70 - 12.20 GHz B - 12.25 - 12.75 GHz C - 10.95 - 11.70 GHz
NOISE FIGURE	07 - 0.7 dB 08 - 0.8 dB 09 - 0.9 dB
L.O. STABILITY	1 - ±10 kHz 2 - ±25 kHz (See HS1000 for < 5 kHz L.O. stability)
LNB SERIES #	

1000HS Series KU-Band PLL

FREQUENCY BANDS AVAILABLE

Typical Service	HS1000A	HS1000B	HS1000C
Input Frequency (GHz)	11.70 to 12.20	12.25 to 12.75	10.95 to 11.70
L.O. Frequency (GHz)	10.75	11.30	10.00
Output Frequency (MHz)	950 to 1450	950 to 1450	950 to 1700

TYPICAL SPECIFICATIONS

Noise Figure	0.7 to 0.9 dB
L.O. Stability (after 60 sec)	±5 kHz to ±2 kHz
Phase Noise (SSB)	-75 dBc/Hz at 1 kHz -80 dBc/Hz at 10 kHz -95 dBc/Hz at 100 kHz
Input VSWR	2.2 : 1
Output VSWR	2.2 : 1
Conversion Gain	60 dB
Output P1dB	5 dBm
Power Requirements	+15 to +24 V supplied through center conductor of IF cable
Current Drain	200 mA
Input Waveguide	WR75
Dimensions	110 (L) x 42 (W) x 42 (H) mm (4.3 x 1.7 x 1.7 in)
Weight	300 g / 10.6 oz
Temperature Range	-40°C to +60°C

HS1048AF

CONNECTOR	F - 75 Ohm N - 50 Ohm
FREQUENCY	A - 11.70 - 12.20 GHz B - 12.25 - 12.75 GHz C - 10.95 - 11.70 GHz
NOISE FIGURE	09 - 0.9 dB 08 - 0.8 dB 07 - 0.7 dB
L.O. STABILITY	5 - ±5 kHz 4 - ±4 kHz 3 - ±3 kHz 2 - ±2 kHz
LNB SERIES #	

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