

7000XPAF

7000 Five-Band Ka-Band PLL LNB

Frequency: A: 17.20 - 18.20 GHz | 18.00 - 19.00 GHz |
18.70 - 19.70 GHz | 19.40 - 20.40 GHz | 20.30 -
21.30 GHz

L.O. Stability: External Reference

Output Connector: F: 75 Ohm



KEY SPECIFICATIONS

Band	Ka-Band
Input Frequency Band 1	17.20 - 18.20 GHz
Input Frequency Band 2	18.00 - 19.00 GHz
Input Frequency Band 3	18.70 - 19.70 GHz
Input Frequency Band 4	19.40 - 20.40 GHz
Input Frequency Band 5	20.30 - 21.30 GHz
LO Frequency 1	16.25 GHz
LO Frequency 2	17.05 GHz
LO Frequency 3	17.75 GHz
LO Frequency 4	18.45 GHz
LO Stability	Ext Ref
LO Type	PLL
Noise Figure Max	1.5 dB
Noise Figure Typ	1.3 dB
Number Of Onboard Los	Five-Band
Output Frequency Band 1	950 - 1950 MHz
Output Frequency Band 2	950 - 1950 MHz
Output Frequency Band 3	950 - 1950 MHz
Output Frequency Band 4	950 - 1950 MHz
Tone Frequency	22 kHz $\pm$ 4 kHz

RF SPECIFICATIONS

Control Signal 1	13V / No Tone
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Control Signal 2	13V / 22kHz Tone
Control Signal 3	18V / No Tone
Control Signal 4	18V / 22kHz Tone
Control Signal 5	24V / 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.
Phase Noise 0.1kHz Offset Max	Depends on External Reference

ELECTRICAL SPECIFICATIONS

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

INTERFACE SPECIFICATIONS

IF Connector	F-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
8517690000	Made in Canada	Richmond, BC, Canada	EAR99	135 mm x 68 mm x 48 mm 0.48 kg

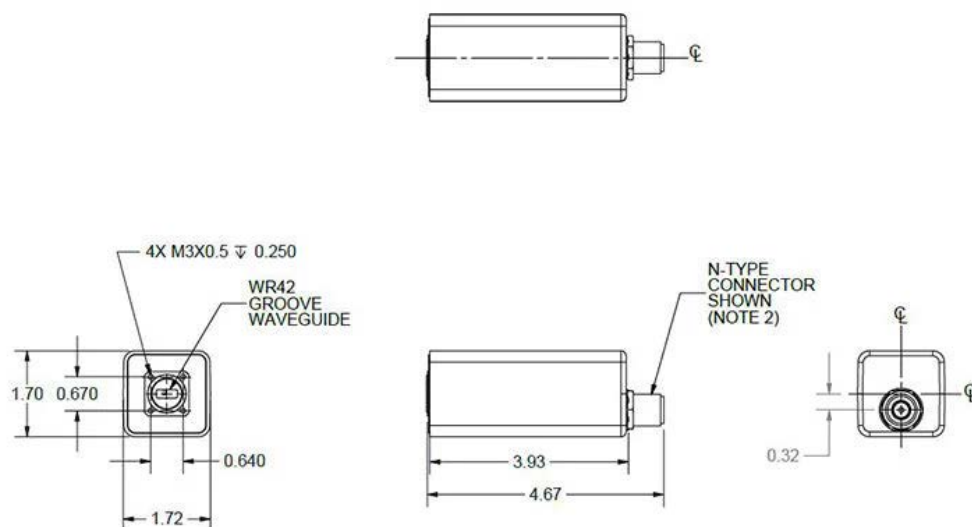
HOW TO ORDER



7200HSAF

LNB SERIES #	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

MECHANICAL DIAGRAMS





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Dual Band				Triple Band				
Band	RF freq. (GHz)		Voltage/Tone	Band	RF Freq. (GHz)		Voltage/Tone	
A	Band 1	17.75 - 18.75	13 V	A	Band 1	17.70 - 18.70	13 V	
	Band 2	18.35 - 19.35	18 V		Band 2	18.45 - 19.45	13 V / 22 kHz	
B	Band 1	18.20 - 19.20	13 V		Band 3	19.20 - 20.20	18 V	
	Band 2	19.20 - 20.20	18 V	B	Band 1	17.70 - 18.70	13 V	
C	Band 1	18.40 - 19.40	13 V	C	Band 2	18.70 - 19.70	13 V / 22 kHz	
	Band 2	19.20 - 20.20	18 V		Band 3	19.70 - 20.20	18 V	
D	Band 1	19.20 - 20.20	13 V		D	Band 1	17.90 - 18.30	13 V
	Band 2	20.20 - 21.20	18 V	Band 2		18.30 - 19.30	13 V / 22 kHz	
E	Band 1	17.20 - 18.20	13 V	E		Band 3	19.30 - 20.30	18 V
	Band 2	17.50 - 18.50	18 V		Band 1	18.20 - 19.20	13 V	
Quad Band				Five Band				
Band	RF Freq. (GHz)		Voltage/Tone	Band	RF Freq. (GHz)		Voltage/Tone	
A	Band 1	17.20 - 18.20	13 V	A	Band 1	17.20 - 18.20	13 V	
	Band 2	18.20 - 19.20	13 V / 22 kHz		Band 2	18.00 - 19.00	13 V / 22 kHz	
	Band 3	19.20 - 20.20	18 V			Band 3	18.70 - 19.70	18 V
	Band 4	20.20 - 21.20	18 V / 22 kHz		B		Band 4	19.40 - 20.40
Band 1	17.50 - 18.50	13 V	Band 5				20.30 - 21.30	24 V
Band 2	18.40 - 19.40	13 V / 22 kHz		Band 1		17.20 - 18.20	13 V	
Band 3	19.30 - 20.30	18 V				Band 2	18.00 - 19.00	13 V / 22 kHz
Band 4	20.20 - 21.20	18 V / 22 kHz						