

# 7100HTAF

## 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:** F: 75 Ohm



## KEY SPECIFICATIONS

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

## RF SPECIFICATIONS

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

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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	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
	Made in Canada	Richmond, BC, Canada	EAR99	135 mm x 68 mm x 48 mm   0.48 kg

## HOW TO ORDER



## 7200HSAF



### MECHANICAL DIAGRAMS





## Innovative Communication Solutions

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		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	C	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		Band 3	19.30 - 20.30	18 V	
	Band 2	17.50 - 18.50	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				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	18.20 - 19.20	13 V / 22 kHz
Band 4	20.20 - 21.20	18 V / 22 kHz	Band 3	18.70 - 19.70	18 V			