

# 7000XDCF

## 7000 Dual-Band Ka-Band PLL LNB

**Frequency:** C: 18.40 - 19.40 GHz | 19.20 - 20.20 GHz

**L.O. Stability:** External Reference

**Output Connector:** F: 75 Ohm



## KEY SPECIFICATIONS

Band	Ka-Band
Input Frequency Band 1	18.40 - 19.40 GHz
Input Frequency Band 2	19.20 - 20.20 GHz
LO Frequency 1	17.45 GHz
LO Frequency 2	18.25 GHz
LO Stability	Ext Ref
LO Type	PLL
Noise Figure Max	1.5 dB
Noise Figure Typ	1.3 dB
Number Of Onboard Los	Dual-Band
Output Frequency Band 1	950 - 1950 MHz
Output Frequency Band 2	950 - 1950 MHz
Tone Frequency	22 kHz $\pm$ 4 kHz

## RF SPECIFICATIONS

Control Signal 1	13V / No Tone
Control Signal 2	18V / No Tone
Conversion Gain Max	65 dB
Conversion Gain Min	55 dB
Conversion Gain Typ	60 dB
Gain Flatness (over Full Band)	$\leq$ 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

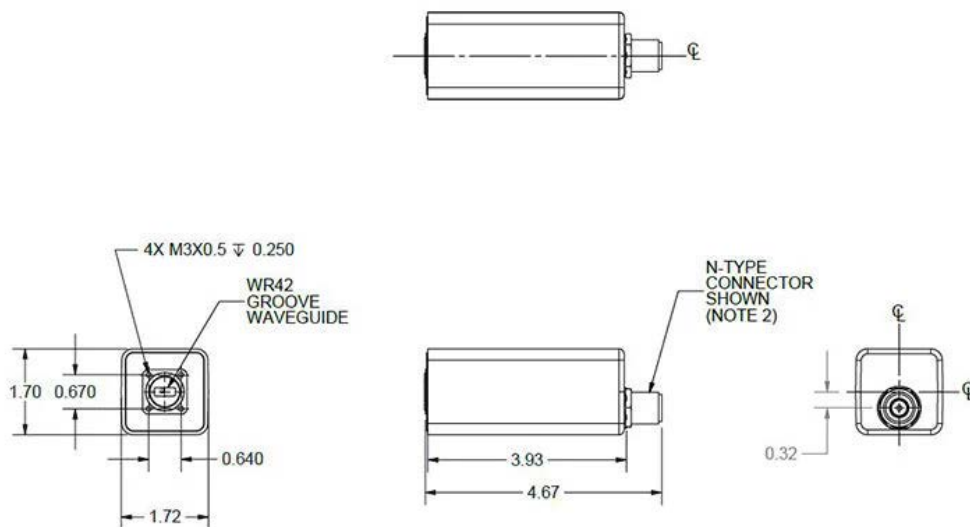
### LOGISTICS SPECIFICATIONS

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



### MECHANICAL DIAGRAMS



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	B	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	D		Band 3	19.30 - 20.30	18 V
	Band 2	17.50 - 18.50	18 V		Band 1	18.20 - 19.20	13 V	
					E	Band 2	19.20 - 20.20	13 V / 22 kHz
				Band 3		20.20 - 21.20	18 V	
				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
B	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 4		19.40 - 20.40		18 V / 22 kHz
	Band 3	19.30 - 20.30	18 V			Band 5	20.30 - 21.30	24 V
	Band 4	20.20 - 21.20	18 V / 22 kHz					