

Innovative Communication Solutions

2209HUAF

2000 Quad-Band Ku-Band PLL LNB

(0.9 dB)

Frequency: A: 10.70 - 11.20 GHz | 11.20 - 11.70 GHz | 11.70 - 12.25 GHz | 12.25 - 12.75 GHz L.O. Stability: +/- 25 kHz Output Connector: F: 75 Ohm





KEY SPECIFICATIONS

Band	Ku-Band
Input Frequency Band 1	10.70 - 11.20 GHz
Input Frequency Band 2	11.20 - 11.70 GHz
Input Frequency Band 3	11.70 - 12.25 GHz
Input Frequency Band 4	12.25 - 12.75 GHz
LO Frequency 1	9.75 GHz
LO Frequency 2	10.25 GHz
LO Frequency 3	10.75 GHz
LO Frequency 4	11.30 GHz
LO Stability	±25 kHz
LO Туре	PLL
Noise Figure Max	1.0 dB
Noise Figure Typ	0.9 dB
Number Of Onboard Los	Quad-Band
Output Frequency Band 1	950 - 1450 MHz
Output Frequency Band 2	950 - 1450 MHz
Output Frequency Band 3	950 - 1500 MHz
Output Frequency Band 4	950 - 1450 MHz
Tone Frequency	22 kHz ± 4 kHz

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Control Signal 1	13V / No Tone
Control Signal 2	13V / 22kHz Tone



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Control Signal 3		18V / No To	ne					
Control Signal 4		18V / 22kHz	Tone					
Conversion Gain Max		65 dB						
Conversion Gain Min		55 dB						
Conversion Gain Typ		60 dB						
Gain Flatness (over Full	Band)	≤ 6 dB p-p						
Input VSWR		2.3 : 1 max.						
Output P1db		+ 5 dBm mir	۱.					
Output VSWR		2.2 : 1 max.						
Phase Noise 0.1khz Offs	et Max	-125 dBc/Hz	<u>.</u>					
ELECTRICAL S	PECIFICATION	NS						
Current Consumption		350 mA max	350 mA max					
Power Requirements		+12 to +24\	+12 to +24V DC					
INTERFACE SP	ECIFICATION	S						
IF Connector		F-Connecto	F-Connector					
RF Input Connector	but Connector WR-75 waveguide grooved							
ENVIRONMENT		ATIONS						
Humidity		0 - 95%						
IP Rating		IP 66	IP 66					
Temperature Operational	re Operational -40°C to +70°C							
Temperature Storage		-50 to +80°C	-50 to +80°C					
PHYSICAL SPE	CIFICATIONS							
Product Height		1.70 in						
Product Length		4.46 in						
Product Weight		0.255 kg						
Product Width		1.72 in						
LOGISTICS SPI	ECIFICATIONS	6						
HS Code	Country of Origin	Ex Works	ECCN Number	Unit Package				
	Made in Canada	Richmond, BC, Canada	EAR99	135 x 68 x 48 mm 0.335 kg				
	D							

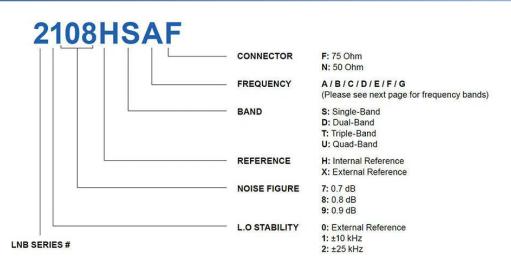
HOW TO ORDER



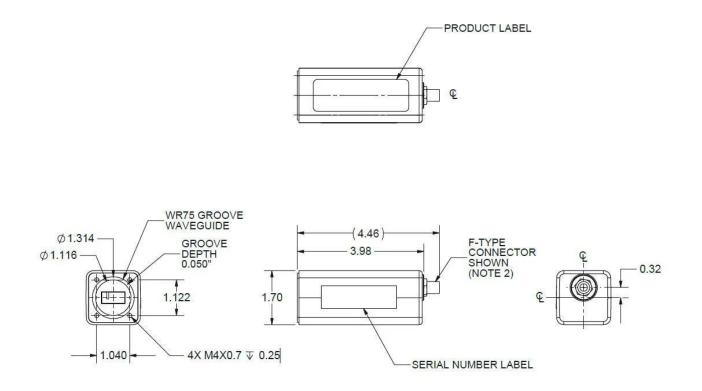
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MECHANICAL DIAGRAMS







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FREQUENCY BANDS

Single Band			Dual Band								
Band	RF	freq (GHz)	L.O freq (GHz)	0	utput freq	Band	Band RF freq (GHz)		L.O freq (GHz)	Output freq	Voltage/Tone
A		1.7 - 12.20	10.75		- 1450 MHz	A	Band 1	10.95 - 11.70	10	950 - 1700 MHz	13 V
B		2.25 - 12.75).95 - 11.70	11.3 10		- 1450 MHz		Dana 1			000 1100 1112	
D	_	0.70-11.80	9.75	950 - 1700 MHz 950 - 2050 MHz			Band 2	11.70 - 12.75	10.75	950 - 2000 MHz	18 V
	1		Triple Band		330 - 2030 Miliz		Band 1	10.70 - 11.70	1.70 9.75	950 - 1950 MHz	13 V
Band	RF	freq (GHz)	L.O freq (GHz)	Output freq	Voltage/Tone	с	Dallu I	10.70 - 11.70	9.75	900 - 1900 MHZ	13 V
	Band 1	10.95 - 11.70	10	950 - 1700 MHz	13 V		Band 2	11.70 - 12.75	10.75	950 - 2000 MHz	18 V
А	Band 2	11.70 - 12.20	10.75	950 - 1450 MHz	13 V / 22 kHz		Band 1	10.95 - 11.70	10	950 - 1700 MHz	13 V
	Band 3	12.20 - 12.75	11.25	950 - 1500 MHz	18 V		Band 2	12.25 - 12.75	11.3	950 - 1450 MHz	18 V
	Band 1	10.95 - 11.70	10	950 - 1700 MHz	13 V	D .	Band 1	10.70 - 11.70	9.75	950 - 1950 MHz	13 V
в	Band 2	11.70 - 12.25	10.75	950 - 1500 MHz	13 V / 22 kHz		Danu i	10.70 - 11.70	5.15	350 - 1350 MHZ	13 Y
_							Band 2	11.70 - 12.75	10.6	1100 - 2150 MHz	18 V
	Band 3	12.25 - 12.75	11.3	950 - 1450 MHz	18 V				Quad Band		
	Band 1	10.70 - 11.70	9.75	950 - 1950 MHz	13 V	Band	RF	freq (GHz)	L.O freq (GHz)	Output freq	Voltage/Tone
С	Band 2	11.70 - 12.20	10.75	950 - 1450 MHz	13 V / 22 kHz	A	Band 1	10.70 - 11.20	9.75	950 - 1450 MHz	13 V
	Band 3	12.20 - 12.75	11.25	950 - 1500 MHz	18 V		Band 2	11.20 - 11.70	10.25	950 - 1450 MHz	13 V / 22 kHz
	Band 1	10.70 - 11.70	9.75	950 - 1950 MHz	13 V		Band 3	11.70 - 12.25	10.75	950 - 1500 MHz	18 V
D	Band 2	11.70 - 12.25	10.75	950-1500 MHz	13 V / 22 kHz		Band 4	12.25 - 12.75	11.3	950 - 1450 MHz	18 V / 22kHz
	Danu 2	11.70 - 12.25	10.75	530-1300 WI12	13 V / 22 KHZ		Band 1	10.70 - 10.95	9.75	950 - 1200 MHz	13 V
	Band 3	12.25 - 12.75	11.3	950-1450 MHz	18 V	в	Band 2	10.95 - 11.70	10	950 - 1700 MHz	13 V / 22 kHz
	Band 1	10.95 - 11.70	10	950 - 1700 MHz	13 V		Band 3	11.70 - 12.25	10.75	950 - 1500 MHz	18 V
E	Band 2	11.55 - 12.25	10.6	950 - 1650 MHz	13 V / 22 kHz		Band 4	12.25 - 12.75	11.3	950 - 1450 MHz	18 V / 22kHz
	Band 3	12.20 - 12.70	11.25	950 - 1450 MHz	18 V	C	Band 1	10.70 - 11.20	9.75	950 - 1450 MHz	13 V
	Band 1	10.70 - 11.80	9.75	950 - 2050 MHz	13 V		Band 2	11.20 - 11.70	10.25	950 - 1450 MHz	13 V / 22 kHz
F	Band 2	10.95 - 12.10	10	950 - 2100 MHz	13 V / 22 kHz		Band 3	11.70 - 12.20	10.75	950 - 1450 MHz	18 V
	Band 3	11.70 - 12.75	10.75	950 - 2000 MHz	18 V		Band 4	12.20 - 12.75	11.25	950 - 1500 MHz	18 V / 22kHz
	Band 1	10.70 - 11.70	9.75	950 - 1950 MHz	13 V	D	Band 1	10.95 - 11.45	10	950 - 1450 MHz	13 V
G	Band 2	11.70 - 12.70	10.75	950 - 1950 MHz	13 V / 22 kHz		Band 2	11.45 - 11.95	10.5	950 - 1450 MHz	13 V / 22 kHz
Ŭ							Band 3	11.70 - 12.20	10.75	950 - 1450 MHz	18 V
	Band 3	12.25 - 12.75	11.3	950 - 1450 MHz	18 V		Band 4	12.20 - 12.75	11.25	950 - 1500 MHz	18 V / 22kHz



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