

Innovative Communication Solutions

2208HUDN

2000 Quad-Band Ku-Band PLL LNB

(0.8 dB)

Frequency: D: 10.95 - 11.70 GHz | 11.70 - 12.25 GHz | 12.25 - 12.75 GHz | 10.70 - 11.70 GHz L.O. Stability: +/- 25 kHz Output Connector: N: 50 Ohm





KEY SPECIFICATIONS

Band	Ku-Band
Input Frequency Band 1	10.95 - 11.70 GHz
Input Frequency Band 2	11.70 - 12.25 GHz
Input Frequency Band 3	12.25 - 12.75 GHz
Input Frequency Band 4	10.70 - 11.70 GHz
LO Frequency 1	10.00 GHz
LO Frequency 2	10.75 GHz
LO Frequency 3	11.30 GHz
LO Frequency 4	9.75 GHz
LO Stability	±25 kHz
LO Туре	PLL
Noise Figure Max	0.9 dB
Noise Figure Typ	0.8 dB
Number Of Onboard Los	Quad-Band
Output Frequency Band 1	950 - 1700 MHz
Output Frequency Band 2	950 - 1500 MHz
Output Frequency Band 3	950 - 1450 MHz
Output Frequency Band 4	950 - 1950 MHz
Tone Frequency	22 kHz ± 4 kHz

RF SPECIFICATIONS

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	1.				
Output VSWR		2.2 : 1 max.					
Phase Noise 0.1khz Offs	et Max	-65 dBc/Hz					
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		N-Connecto	N-Connector				
RF Input Connector		WR-75 wave	WR-75 waveguide grooved				
ENVIRONMENT		ATIONS					
Humidity		0 - 95%					
IP Rating		IP 66					
Temperature Operational		-40°C to +70	-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	5					
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						

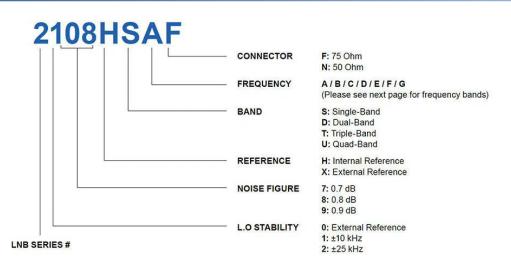
HOW TO ORDER



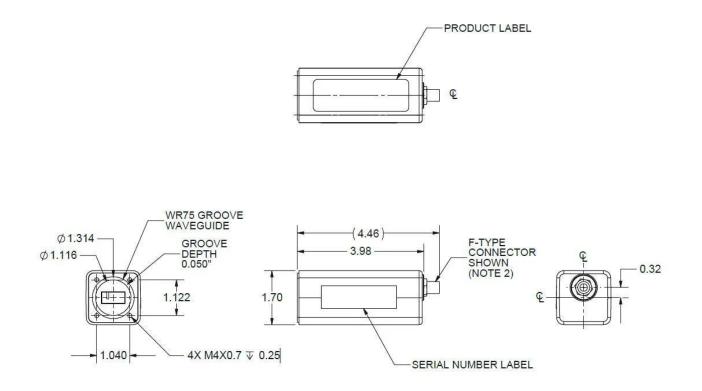
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MECHANICAL DIAGRAMS







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FREQUENCY BANDS

Band A B C D	1	freq (GHz) 1.7 - 12.20	L.O freq (GHz)	-							Dual Band				
BC		17-1220			utput freq	Band	RF freq (GHz)		L.O freq (GHz)	Output freq	Voltage/Tone				
С	12		10.75		- 1450 MHz	A	Band 1	10.95 - 11.70	10	950 - 1700 MHz	13 V				
	10	.25 - 12.75	11.3 10		- 1450 MHz - 1700 MHz										
		0.70-11.80	9.75		50 - 2050 MHz	1	Band 2	11.70 - 12.75	10.75	950 - 2000 MHz	18 V				
			Triple 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	в	в	Dana 1	10.10 11.10	0.10	000 1000 1112				
Band	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				
A	Band 2	11.70 - 12.20	10.75	950 - 1450 MHz	13 V / 22 kHz	с	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										
F	Band 3	12.25 - 12.75	11.3 950 - 1450 MHz 18 V		Band 2	11.70 - 12.75	10.6	1100 - 2150 MHz	18 V						
									Quad Band						
Ļ	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				
C Ba	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				
F	Daniel 2	42.25 42.75	44.2	050 4450 141-	18 V		Band 1	10.70 - 10.95	9.75	950 - 1200 MHz	13 V				
	Band 3	12.25 - 12.75	11.3	950-1450 MHz		В	Band 2	10.95 - 11.70	10	950 - 1700 MHz	13 V / 22 kHz				
Ļ	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 B	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	С	Band 1	10.70 - 11.20	9.75	950 - 1450 MHz	13 V				
Band	Band 1	10.70 - 11.80	<mark>9</mark> .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				
ľ	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 Band 2	10.95 - 11.45 11.45 - 11.95	10 10.5	950 - 1450 MHz 950 - 1450 MHz	13 V 13 V / 22 kHz				
	Band 2	11.70 - 12.70	10.75	950 - 1950 MHz	13 V / 22 kHz		Band 2 Band 3	11.45 - 11.95	10.5	950 - 1450 MHz 950 - 1450 MHz	13 V / 22 KHZ				
ŀ	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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