

# 9000X4ADN

## 9000X4 Ka-Band Quad Band EXT REF LNB

**Frequency:** AD: 18.20 - 22.20 GHz

**Isolator:** No

**Output Connector:** N: 50 Ohm



## KEY SPECIFICATIONS

|                         |                                   |
|-------------------------|-----------------------------------|
| Band                    | Ka-Band                           |
| External Ref Freq       | 10 MHz (sine-wave), - 5 to +5 dBm |
| Input Frequency Band 1  | 18.20 - 19.20 GHz                 |
| Input Frequency Band 2  | 19.20 - 20.20 GHz                 |
| Input Frequency Band 3  | 20.20 - 21.20 GHz                 |
| Input Frequency Band 4  | 21.20 - 22.20 GHz                 |
| LO Frequency 1          | 17.25 GHz                         |
| LO Frequency 2          | 18.25 GHz                         |
| LO Frequency 3          | 19.25 GHz                         |
| LO Frequency 4          | 20.25 GHz                         |
| LO Stability            | Ext Ref                           |
| LO Type                 | EXT                               |
| Noise Figure Max        | 2.0 dB                            |
| Noise Figure Typ        | 1.5 dB                            |
| Number Of Onboard Los   | Quad-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                    |

## RF SPECIFICATIONS

|                     |                  |
|---------------------|------------------|
| Control Signal 1    | 13V / No Tone    |
| Control Signal 2    | 13V / 22kHz Tone |
| Control Signal 3    | 18V / No Tone    |
| Control Signal 4    | 18V / 22kHz Tone |
| Conversion Gain Max | 65 dB            |
| Conversion Gain Min | 55 dB            |
| Conversion Gain Typ | 60 dB            |

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|                                |                               |
|--------------------------------|-------------------------------|
| Gain Flatness (over Full Band) | ≤ 4 dB p-p max.               |
| Input VSWR                     | 3.5 : 1 max.                  |
| Output P1db                    | + 10 dBm min.                 |
| Output VSWR                    | 2.0 : 1 max.                  |
| Phase Noise 100khz Offset Max  | Depends on External Reference |

## ELECTRICAL SPECIFICATIONS

|                     |                |
|---------------------|----------------|
| Current Consumption | 350 mA         |
| Power Requirements  | +12 to +24V DC |

## INTERFACE SPECIFICATIONS

|                    |                         |
|--------------------|-------------------------|
| IF Connector       | N-Connector             |
| Isolator           | No Isolator             |
| RF Input Connector | WR-42 waveguide grooved |

## ENVIRONMENTAL SPECIFICATIONS

|                         |                |
|-------------------------|----------------|
| IP Rating               | IP 67          |
| Temperature Operational | -40°C to +60°C |
| Temperature Storage     | -40 to +80°C   |

## PHYSICAL SPECIFICATIONS

|                |         |
|----------------|---------|
| Product Height | 39 mm   |
| Product Length | 134 mm  |
| Product Weight | 0.56 kg |
| Product Width  | 67 mm   |

## LOGISTICS SPECIFICATIONS

| HS Code    | Country of Origin             | Ex Works             | ECCN Number | Unit Package               |
|------------|-------------------------------|----------------------|-------------|----------------------------|
| 8517690000 | Made in the Republic of Korea | Richmond, BC, Canada | EAR99       | 145 x 95 x 65 mm   0.55 kg |

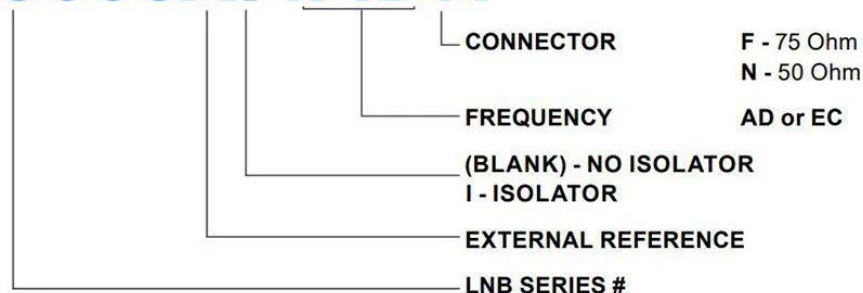
## HOW TO ORDER



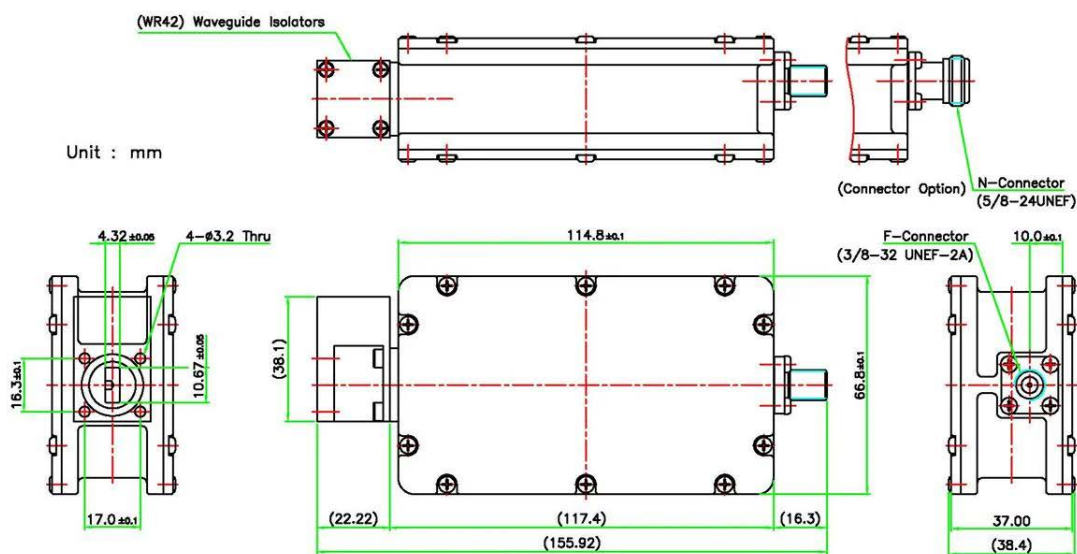
Norsat  
International Inc.

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### MECHANICAL DIAGRAMS



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