

# 9200HICDN

## 9200 Dual-Band Ka-Band PLL LNB

**Frequency:** CD: 20.2 - 21.2 | 21.2 - 22.2 GHz

**W/G Isolator:** Yes

**Output Connector:** N: 50 Ohm



## KEY SPECIFICATIONS

|                                |                   |
|--------------------------------|-------------------|
| <b>Band</b>                    | Ka-Band           |
| <b>Input Frequency Band 1</b>  | 20.20 - 21.20 GHz |
| <b>Input Frequency Band 2</b>  | 21.20 - 22.20 GHz |
| <b>LO Frequency 1</b>          | 19.25 GHz         |
| <b>LO Frequency 2</b>          | 20.25 GHz         |
| <b>LO Stability</b>            | ±25 kHz           |
| <b>LO Type</b>                 | PLL               |
| <b>Noise Figure Max</b>        | 1.8 dB            |
| <b>Noise Figure Typ</b>        | 1.5 dB            |
| <b>Number Of Onboard Los</b>   | Dual-Band         |
| <b>Output Frequency Band 1</b> | 950 - 1950 MHz    |
| <b>Output Frequency Band 2</b> | 950 - 1950 MHz    |

## RF SPECIFICATIONS

|                                       |               |
|---------------------------------------|---------------|
| <b>Control Signal 1</b>               | 13V / No Tone |
| <b>Control Signal 2</b>               | 18V / No Tone |
| <b>Conversion Gain Max</b>            | 65 dB         |
| <b>Conversion Gain Min</b>            | 55 dB         |
| <b>Conversion Gain Typ</b>            | 60 dB         |
| <b>Gain Flatness (over Full Band)</b> | ≤ 5 dB p-p    |
| <b>Input VSWR</b>                     | 1.5 : 1 max.  |
| <b>Output P1db</b>                    | + 5 dBm min.  |
| <b>Output VSWR</b>                    | 2.3 : 1 max.  |



## Innovative Communication Solutions

|                               |            |
|-------------------------------|------------|
| Phase Noise 1khz Offset Max   | -70 dBc/Hz |
| Phase Noise 10khz Offset Max  | -78 dBc/Hz |
| Phase Noise 100khz Offset Max | -95 dBc/Hz |

## ELECTRICAL SPECIFICATIONS

|                     |                |
|---------------------|----------------|
| Current Consumption | 450 mA max.    |
| Power Requirements  | +12 to +24V DC |

## INTERFACE SPECIFICATIONS

|                    |                         |
|--------------------|-------------------------|
| IF Connector       | N-Connector             |
| Isolator           | With 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 | 45 mm    |
| Product Length | 144.3 mm |
| Product Weight | 0.465 kg |
| Product Width  | 60 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       | 118 mm x 60 mm x 45 mm   0.4 kg |

## HOW TO ORDER

### 9200HIABN

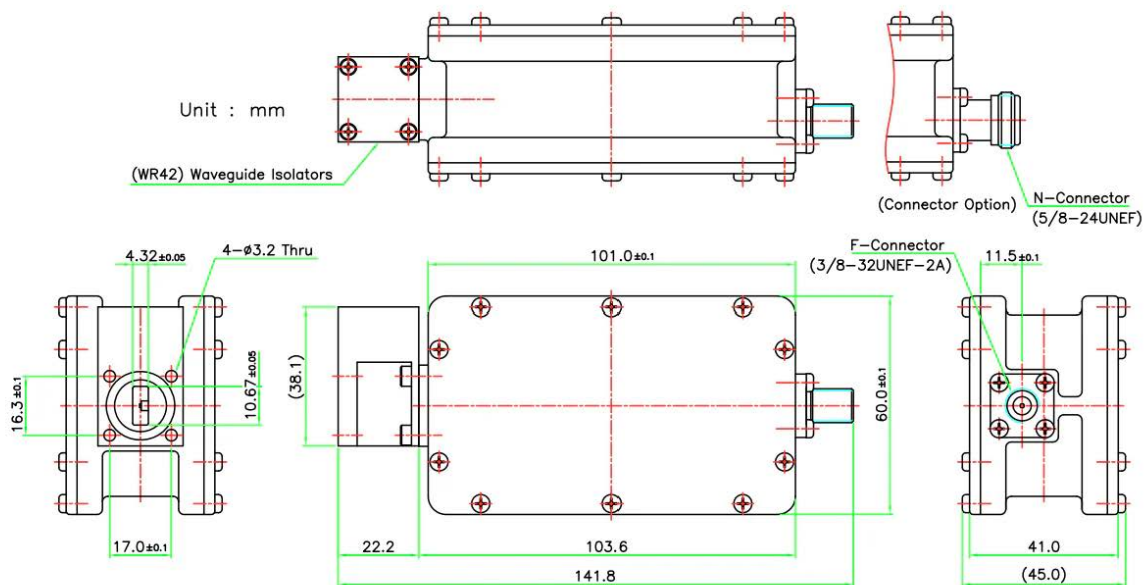
|                |                                                                                                                         |
|----------------|-------------------------------------------------------------------------------------------------------------------------|
| CONNECTOR      | F: 75 Ohm<br>N: 50 Ohm                                                                                                  |
| FREQUENCY      | AB: 18.2 - 19.2 GHz & 19.2 - 21.2 GHz<br>BC: 19.2 - 20.2 GHz & 20.2 - 21.2 GHz<br>CD: 20.2 - 21.2 GHz & 21.2 - 22.2 GHz |
| W/G ISOLATOR   | BLANK: No isolator<br>I: With Isolator                                                                                  |
| REFERENCE      | H: Internal<br>X: External                                                                                              |
| L.O. STABILITY | 2: ± 25 kHz<br>5: ± 50 kHz<br>7: ± 70 kHz                                                                               |
| LNB SERIES #   |                                                                                                                         |

## MECHANICAL DIAGRAMS



Norsat  
International Inc.

Innovative Communication Solutions



Norsat  
International Inc.

ESATCOM  
INC

Esatcom Inc  
Norsat authorized distributor  
[www.esatcom.com](http://www.esatcom.com)

Tel  
718.799.0084

Email  
[sales@esatcom.com](mailto:sales@esatcom.com)