

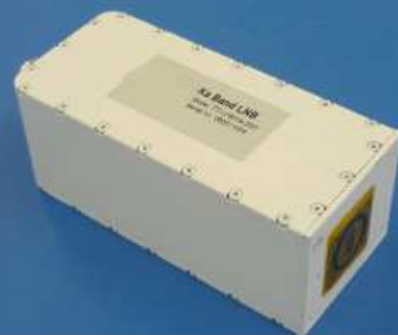
# LNB-Ka

## Ka-Band Low Noise Block



The **Ka-band LNB Series** are the Low Noise Blocks which converts the satellite signal from Ka band to L band (1-2 GHz). The equipment has a minimum gain of 63 dB, providing very good stability with temperature.

It provides a combination of superior performance, reliability and cost effectiveness.



## TECHNICAL SPECIFICATIONS

### ELECTRICAL

|                       | LNB-KA-1920     | LNB-KA-2021     |
|-----------------------|-----------------|-----------------|
| Input Frequency Band  | 19.2 – 20.2 GHz | 20.2 – 21.2 GHz |
| Output Frequency Band | 1 – 2 GHz       |                 |
| Local Oscillator      | 18.2 GHz        | 19.20 GHz       |

|  |  |
|--|--|
| Output Spectrum.....                                       | Not inverted   |
| Noise Figure.....  | < 1.44 dB  |
| Gain.....  | > 63 dB  |
| Gain flatness over 36MHz.....                              | ± 0.5dB in any 36MHz   |
| Gain flatness over full bandwidth.....                     | ± 1dB in full band 1GHz  |
| Gain stability over temperature at constant frequency..... | ± 0.9dB in full band 1GHz  |
| Gain stability at constant temperature.....                | ± 0.5dB 24 hours   |
| P1dB.....  | >13dBm   |
| OIP3.....  | >24dBm   |
| Input VSWR.....  | <1.8:1   |
| Output VSWR.....   | <1.53:1  |
| Spurious at P1dB.....                                      | < -60 dBc  |
| IMD.....   | -29dBc @ P1dB - 3dB (Pout=10dBm)   |
| Maximum input level.....                                   | -35 dBm  |
| SSB Phase Noise.....                                       | -65dBc/Hz@100Hz<br>-70dBc/Hz@1KHz<br>-90dBc/Hz@10KHz<br>-108dBc/Hz@100KHz<br>-113dBc/Hz@1MHz |
| External Reference.....                                    | 10MHz, 0dBm±5dB (via IF Output Connector)  |
| Power Supply Voltage.....                                  | 9 to 18 VDC (supplied through IF Output Connector)   |
| Power consumption.....                                     | 303mA (9V), 150mA (18V)  |

### PHYSICAL & INTERFACES

|                          |                    |
|--------------------------|--------------------|
| Input RF connector.....  | WR-42              |
| Output RF connector..... | N (f)              |
| Size.....                | 112.7 x 44 x 50 mm |

### ENVIRONMENTAL

|                              |                 |
|------------------------------|-----------------|
| Operational temperature..... | -30°C to 60°C   |
| Storage temperature.....     | -40°C to +85°C  |
| Humidity.....                | 100% condensing |

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