

# Product Specification Summary

## Low-Noise Block Downconverter For Ka-band Satcom Applications

This high-performance model accepts the Ka receive band of 20.2 to 21.1 GHz and translates it to an L-band output between 1 and 2 GHz. The front-end LNA has a noise figure of 1.4 dB and a filter integrated before the even-harmonic mixer provides high image and LO rejection at the input port.

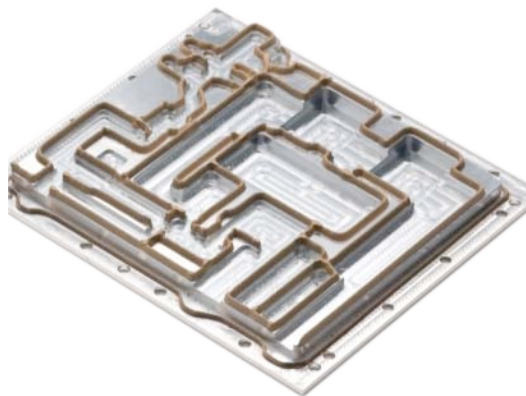
Voltage-variable attenuators are located in the RF and IF amplification paths to ensure optimum gain and dynamic range. A separate port allows use of an external 9.6-GHz LO signal, or an optional internal oscillator can supply a low-phase-noise LO signal phased-locked to a reference signal multiplexed on the L-band output port (along with DC power if desired).

## BUC/BDC Series

### Key features

- Designed for demanding Ka-band satellite communications transceivers
- Accepts 20.2 to 21.1 GHz at waveguide input and outputs 1 to 2 GHz via SMA output
- Low noise figure
- VVAs in RF and IF amplification paths ensure high gain and dynamic range

### Narda's Low-Noise Block Downconverter Employs Proprietary Construction Techniques



|                                 |               |
|---------------------------------|---------------|
| Input frequency (GHz)           | 20.2 to 21.2  |
| Output frequency (GHz)          | 1 to 2        |
| Output spectrum                 | Non-inverting |
| Input RF waveguide              | WR-42         |
| Output IF connector             | SMA           |
| RF gain range(dB)               | 20 to 40      |
| IF gain range (dB)              | -24 to -12    |
| Noise temperature (°K, nominal) | 110           |
| LO frequency (GHz)              | 9.6           |

Please consult the factory for detailed product specifications.

**narda**  
microwave-east

an  communications company

Address: 435 Moreland Road, Hauppauge, NY 11788  
 Phone: (631) 231-1700  
 Fax: (631) 231-1711  
 Web: <http://www.nardamicrowave.com>  
 E-Mail: [nardaeast@l-3com.com](mailto:nardaeast@l-3com.com)