

The Newtec modems can be combined with a performant ODU portfolio. The BUCs and LNBs have been selected to provide optimal performance.

When selecting an outdoor unit, a trade-off can be made based on two main criteria: Peak rate and cost. Cost considerations involve the price of the full terminal, the cost of installation and ownership, and of course the price per Mbit. The Newtec modems support multiple waveforms that enable this trade-off between cost and peak rate per application.

High Efficiency Output Power

Newtec modems always operate at the maximum output power supported by the waveform and the BUC. A waveform supporting saturation (e.g. 4CPM) can operate at the saturated output power of the BUC. Other waveforms operate at a power back off as close as possible to the saturated output power.

Low Cost and Low Power Consumption

The efficient use of the BUC power enables the use of less powerful BUCs that are lower cost. Using a smaller, less powerful BUC also means using less electricity to power each terminal. With an average power efficiency of 11%, a difference of 1 Watt in the output power translates into a difference of 9 Watts of power consumption.

Ease of Installation

The ODU portfolio is compatible with Point&Play® easy-installation technology, enabling the installation of the complete terminal by installers without any specific qualification or expensive tooling.

LNB SPECIFICATIONS



NEWTEC LNB0120 - UNIVERSAL (DUAL LO) KU-BAND LNB

Highlights

- Integrated LNB and TX Reject Filter
- Dual local oscillator
- Highly accurate internal PLL reference

Performance

- Noise Figure 0.8 dB typical
- Gain 50 - 60 dB
- LO Stability 50 ppm

Coverage

- Full Ku-band
RF Frequency 10.7 to 12.75 GHz
Local Oscillator 9.75 (22 kHz off) or 10.6 GHz (22 kHz on)

Interfaces

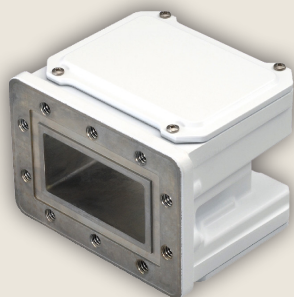
- Input Interface: Waveguide: WG17, R120, WR75, UBR120
- F-connector (75 Ohm)

Mechanical & Environment

- Housing 82.2 (L) x 40 (W) x 40 (H) mm
- Weight 210 g
- Operating temperature -40°C to 60°C
- Storage Temperature -40°C to 80°C

Standards

- RoHS Compliance
- CE
- WEEE



NEWTEC LNB0300 - C-BAND PLL LNB

Highlights

- Superior phase noise performance

Performance

- Noise Figure 0.7 dB typical
- Gain 57 - 70 dB
- Image Rejection 68 dB typical
- Tx power handling @5.58GHz -26 dBm typical

Coverage

- Standard C-band
RF Frequency 3.625 to 4.200 GHz
Local Oscillator 5.15 GHz

Interfaces

- Input Interface: Waveguide, CPR229 (with Groove)
- F-connector (75 Ohm)

Mechanical & Environment

- Housing 80.8 (L) x 99.6 (W) x 76 (H) mm
- Weight 800 g
- Operating temperature -40°C to 60°C
- Humidity 0% - 100%

Standards

- RoHS Compliance
- CE
- WEEE



NEWTEC BUC0100 - 3W KU-BAND UNIVERSAL BLOCK UPCONVERTER

Performance

- Output Power
P1dB +34 dBm min. over temperature
Psat +35.3 dBm @ 14 GHz
- Distortion
ACPR 26 dBc @ Pout = +34 dBm
- Power Consumption 18 W typical / 23 W max.

Coverage

- Full Ku-band
RF Frequency 13.75 to 14.50 GHz
Local Oscillator 12.8 GHz

Interfaces

- Waveguide WR75 with Groove
- Connector F-connector (75 Ohm)

Mechanical & Environment

- Housing 91.55 (L) x 68 (W) x 42.5 (H) mm
- Weight 350 g
- Operating temperature -40°C to 55°C
- Humidity 0% - 100%

Standards

- RoHS Compliance
- CE compliance
- WEEE



NEWTEC BUC0130 - 2W STANDARD C-BAND BLOCK UPCONVERTER

Performance

- Output Power
P1dB +34.5 dBm min. over temperature
Psat +35 dBm @ 6.15 GHz typical
- Distortion
ACPR 26 dBc @ Pout = +34 dBm
- Power Consumption 19 W typ.

Coverage

- Standard C-band
RF Frequency 5.85 to 6.425 GHz
Local Oscillator 4.9 GHz

Interfaces

- Waveguide WR75 with Groove
- Connector F-connector (75 Ohm)

Mechanical & Environment

- Housing 190.6 (L) x 160 (W) x 59 (H) mm
- Weight 1.9 kg
- Operating temperature -40°C to 55°C
- Humidity 0% - 100%

Standards

- RoHS Compliance
- CE compliance
- WEEE



NEWTEC TRX0110 - 3W KA-BAND TRANSCEIVER

Performance RX

- Noise Figure 1.5 dB max
- Gain 50 - 62 dB

Performance TX

- Output Power
P1dB +34.5 dBm typical
Psat +36.2 dBm @ 29.75 GHz typical
- Distortion
ACPR 26 dBc @ Pout = +32.5 dBm typical
- Power Consumption 31 W max.

Coverage

- TX
RF Frequency 29.5 to 30 GHz
Local Oscillator 28.55 GHz
- RX
RF Frequency 19.2 to 20.2 GHz
Local Oscillator 18.25 GHz

Interfaces

- Waveguide Proprietary interface to polarizer
- Connector F-connector (75 Ohm)

Mechanical & Environment

- Housing 190.6 (L) x 160 (W) x 59 (H) mm
- Weight 1.8 kg
- Operating temperature -40°C to 60°C
- Humidity 0% - 100%

Standards

- RoHS Compliance
- CE compliance
- WEEE



NEWTEC BUC0200 - 4W KU-BAND UNIVERSAL BLOCK UPCONVERTER

Performance

- Output Power
P1dB +36 dBm min. over temperature
Psat +37.5 dBm @ 14 GHz
- Distortion
ACPR 26 dBc @ Pout = +35 dBm
- Power Consumption 37 W max.

Coverage

- Full Ku-band :
RF Frequency 13.75 to 14.50 GHz
Local Oscillator 12.8 GHz

Interfaces

- Waveguide WR75 with Groove
- Connector F-connector (75 Ohm)

Mechanical & Environment

- Housing 175.9 (L) x 143 (W) x 56.5 (H) mm
- Weight 1.7 kg
- Operating temperature -40°C to 55°C
- Humidity 0% - 100%

Standards

- RoHS Compliance
- CE compliance
- WEEE



NEWTEC BUC0330 - 5W STANDARD C-BAND BLOCK UPCONVERTER

Performance

- Output Power
P1dB +37 dBm min. over temperature
Psat 39.3 dBm @ 6.15GHz typical
- Distortion
ACPR 26 dBc @ Pout = +38 dBm
- Power Consumption 48 W max.

Coverage

- Standard C-band
RF Frequency 5.85 to 6.425 GHz
Local Oscillator 4.9 GHz

Interfaces

- Waveguide WR75 with Groove
- Connector F-connector (75 Ohm)

Mechanical & Environment

- Housing 190.6 (L) x 160 (W) x 59 (H) mm
- Weight 1.9 kg
- Operating temperature -40°C to 55°C
- Humidity 0% - 100%

Standards

- RoHS Compliance
- CE compliance
- WEEE



NEWTEC BUC0300 - 6W KU-BAND UNIVERSAL BLOCK UPCONVERTER

Performance

- Output Power
P1dB Min. 37.8W over temperature
- Distortion
ACPR -30 dBc typ.,
-24 dBc max. @ Pout = +37.8 dBm
- Power Consumption Max. 48W @ +37.8dBm

Coverage

- Standard C-band
RF Frequency 13.75 to 14.50 GHz
Local Oscillator 12.8 GHz

Interfaces

- Waveguide WR75 with Groove
- Connector F-connector (75 Ohm)

Mechanical & Environment

- Housing 174.9 (L) x 84 (W) x 59.2 (H) mm
- Weight 1.2 kg
- Operating temperature -40 to 60°C
- Humidity 0% - 100%

Standards

- RoHS Compliance
- CE compliance
- WEEE

Contact your sales representative for other configurations (sales@newtec.eu).

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