

Innovative Communication Solutions

BUC

LOW KU-BAND 14W ATOMBKU014BCE



NORSAT ATOM SERIES BUCS

Compared to equivalent products, ATOM series BUCs are:

- Up to 68% smaller and lighter
- Up to 60% more power efficient
- More flexible with RF and configuration options

The Norsat ATOM series of block upconverters (BUC) are among the smallest, lightest, and most energy efficient transmitters available. The high efficiency of ATOM reduces power consumption significantly, delivering considerable operational cost savings over the lifetime of the device.

RF CONFIGURATIONS

Transmit Frequency

Custom band 12.75 to 13.25 GHz

Input Frequency

Standard band 950 to 1450 MHz

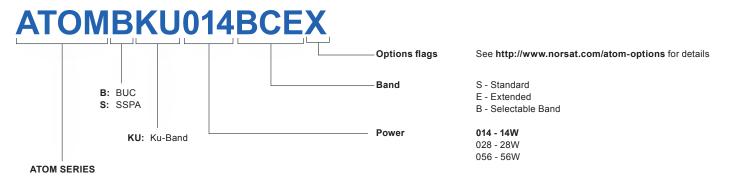
OPTIONS

The following items are standard: White paint, N-Type input connector, WR-75 waveguide output, Fan cooling, DC Power.

Available options include: Baseplate Cooling, Surge + Protect Filter, SMA Input Connector, WR-62 Waveguide Output.

Accessories: Power supply, Bracket, Waveguides, Cables, Adaptors

HOW TO ORDER





North America +1 800 644 4562 **Asia Pacific** +1 604 821 2813 **EMEA** +44 1522 730 800 South America +1 604 821 2835 Online www.norsat.com

LOW KU-BAND 14W BUC-ATOMBKU014BCE

RF SPECIFICATIONS

Power Output (P1dB) 14W min

Noise Figure 15 dB

 Phase Noise
 -72 dBc/Hz at 1 KHz

 -82 dBc/Hz at 10 KHz

-92 dBc/Hz at 100 kHz -102 dBc/Hz at 1 MHz

Fwd Monitor (15 dB Range) @ CF <u>±</u>1.0 dB

Conversion Gain60 dB minGain Variation over operating band8 dB max p-pGain Variation over any 40 MHz2 dB max p-pGain Variation over temperature3 dB max p-p

 Input VSWR
 2.0:1

 Output VSWR
 2.0:1

 Spurious @ rated power
 -50 dBc

 AM/PM Conversion @2dB below
 3.5°/dB rated

AM/PM Conversion @2dB below

2nd Harmonic @ 3dB below rated power -45 dBc

ENVIRONMENTAL & PHYSICAL

Operating Temperature with fans $-40 \text{ to } +60 ^{\circ}\text{C} \ (-40 ^{\circ} \text{ to } +140 ^{\circ}\text{F})$

Storage Temperature -54 to +80°C (-65° to + 176°F)

Outline Dimensions 170 x 86 x 157 mm (6.5 x 3.2 x 6.1")

Weight 2.3 kg (5.0 lbs)

Enclosed Accessories Screws, gasket, M&C mating connector, power mating connector

INTERFACES

RF Input Connector N-Type

RF Output Connector WR-75 (WR-62 above 15 GHz)

MONITOR & CONTROL

M&C Interface RS-232 & RS-485

M&C Connector MIL-26482 Series 1 Receptacle, Shell Size

12, 10 Pins

Mute Control Fully configurable (mute enable: high

or low, mute default: enabled or disabled

Low 0.0 - 0.8V **High** 3.0 - 5.0V

Thermal Shutdown Temperature 90°C (Accuracy ± 3°C)

POWER

 $\begin{tabular}{ll} \mbox{Input Voltage} & 20 - 56 \mbox{ VDC} \\ \mbox{Power Consumption with fans} & 165 \mbox{W} \ @ \mbox{Psat} \\ \end{tabular}$

147W @ P1dB

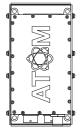
126W @ 3dB backoff from P1dB 115W @ Quiescent (no signal input)

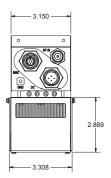
20W muted

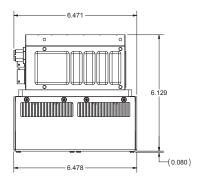
Power Connector MIL-26482 Series 1 receptacle

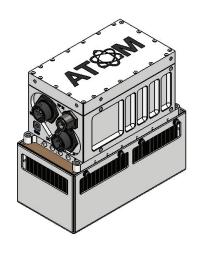
Shell size 12, 4 pins

MECHANICAL DIAGRAM











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