

Innovative Communication Solutions

BUC KU-BAND 25W ATOMBKU025



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

Standard band 14.0 to 14.5 GHz

LO Frequency 13.05 GHz

Extended band 13.75 to 14.5 GHz

LO Frequency 12.8 GHz

Selectable band *Custom within range 12.25 to 18.0 GHz

Input Frequency

Standard band 950 to 1450 MHz Extended band 950 to 1700 MHz

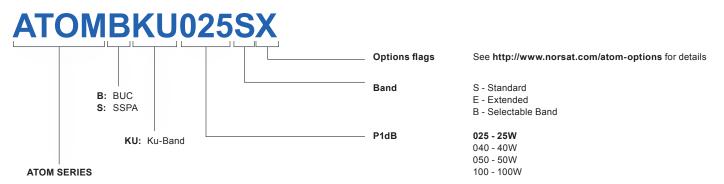
OPTIONS

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

KU-BAND 25W BUC-ATOMBKU025

RF SPECIFICATIONS

 Power Output (P1dB)
 25W

 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 ±1.0 dB

Conversion Gain 60 dB min

Gain Variation over operating band 6 dB max p-p

Gain Variation over any 40 MHz 2 dB max p-p

Gain Variation over temperature 3 dB max p-p
Input VSWR 2.0:1
Output VSWR 2.0:1

Spurious @ rated power -55 dBc

AM/PM Conversion @2dB below 2.5°/dB rated

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 - 0.8 V **High** 3.0 - 5.0 V

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

POWER

Input Voltage 20 - 56 VDC

Power Consumption with fans 165W @ Psat (Typical)

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

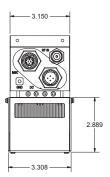
20W muted

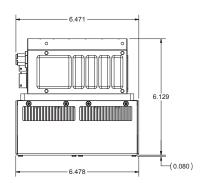
Power Connector MIL-26482 Series 1 receptacle

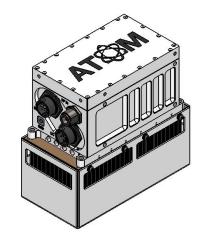
Shell size 12, 4 pins

MECHANICAL DIAGRAM















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