



# BUC

## KU-BAND 50W

### ATOMBKU050



#### 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
<i>LO Frequency</i>	13.05 GHz
Extended band	13.75 to 14.5 GHz
<i>LO Frequency</i>	12.8 GHz
Selectable band <i>*Custom within range</i>	12.25 to 18.0 GHz

##### Input Frequency

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

#### OPTIONS

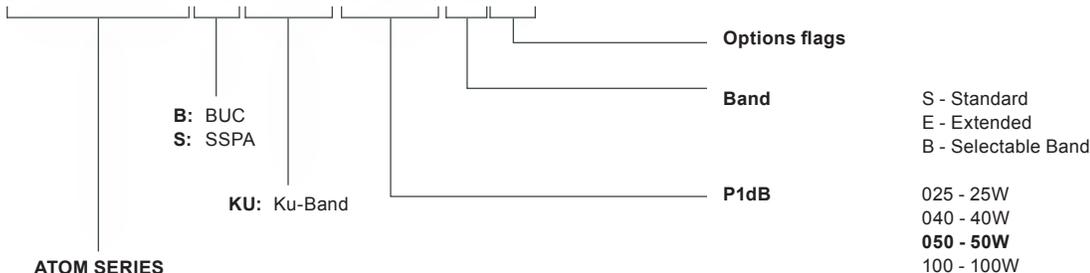
**The following items are standard:** White paint, N-Type input connector, WR-75 waveguide output, Fan cooling, DC Power.

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

**Accessories:** Power Supply, Bracket, Waveguides, Cables, Adaptors.

#### HOW TO ORDER

## ATOMBKU050SX



# KU-BAND 50W BUC-ATOMBKU050

## RF SPECIFICATIONS

<b>Power Output (P1dB)</b>	50W
<b>Noise Figure</b>	15 dB
<b>Phase Noise</b>	-72 dBc/Hz at 1 KHz -82 dBc/Hz at 10 KHz -92 dBc/Hz at 100 kHz -102 dBc/Hz at 1 MHz
<b>Fwd Monitor (15 dB Range) @ CF</b>	± 1.0 dB
<b>Conversion Gain</b>	60 dB min
<b>Gain Variation over operating band</b>	6 dB max p-p
<b>Gain Variation over any 40 MHz</b>	2 dB max p-p
<b>Gain Variation over temperature</b>	3 dB max p-p
<b>Input VSWR</b>	2.0:1
<b>Output VSWR</b>	2.0:1
<b>Spurious @ rated power</b>	-55 dBc
<b>AM/PM Conversion @2dB below</b>	2.5°/dB rated power
<b>2nd Harmonic @ 3dB below rated power</b>	-45 dBc

## ENVIRONMENTAL & PHYSICAL

<b>Operating Temperature with fans</b>	-40 to +60°C (-40° to +140°F)
<b>Storage Temperature</b>	-54 to + 80°C (-65° to + 176°F)
<b>Outline Dimensions</b>	170 x 86 x 170mm (6.7 x 3.4 x 6.7")
<b>Weight</b>	2.4kg (5.4 lbs)
<b>Enclosed Accessories</b>	Screws, gasket, M&C mating connector, power mating connector

## INTERFACES

<b>RF Input Connector</b>	N-Type
<b>RF Output Connector</b>	WR-75 (WR-62 above 15 GHz)

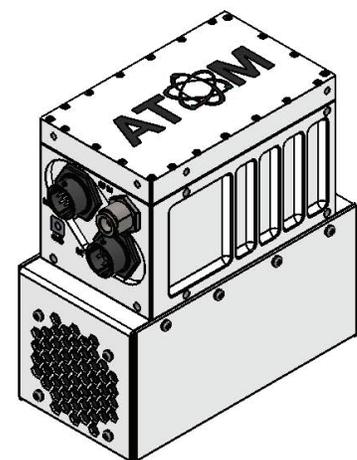
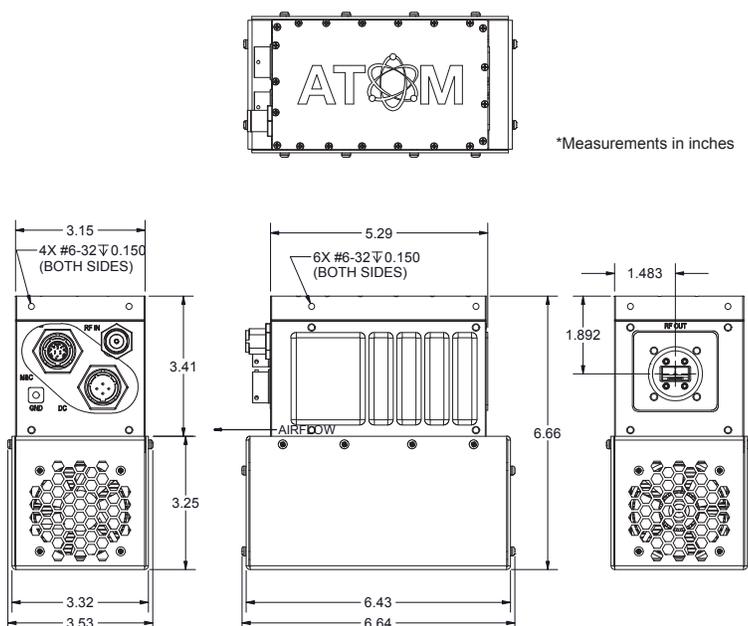
## MONITOR & CONTROL

<b>M&amp;C Interface</b>	RS-232 & RS-485
<b>M&amp;C Connector</b>	MIL-26482 Series 1 Receptacle, Shell Size 12, 10 Pins
<b>Mute Control</b>	Fully configurable (mute enable: high or low, mute default: enabled or disabled)
<b>Low</b>	0.0 - 0.8V
<b>High</b>	3.0 - 5.0V
<b>Thermal Shutdown Temperature</b>	90°C (Accuracy ± 3°C)

## POWER

<b>Input Voltage</b>	20 - 56 VDC
<b>Power Consumption with fans</b>	350W @ Psat 310W @ P1dB 270W @ 3dB backoff from P1dB 240W @ Quiescent (no signal input) 25W muted
<b>Power Connector</b>	MIL-26482 Series 1 receptacle Shell size 12, 4 pins

## MECHANICAL DIAGRAM



Request A Quote