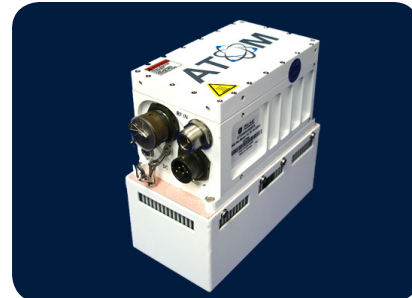




# BUC

## KA-BAND 50W

### ATOMBKA050



### NORSAT ATOM SERIES BUCS

Compared to equivalent products, ATOM series BUCs are:

- *Up to 20% smaller*
- *Up to 50% lighter*
- *Internal isolation to provide reflected power protection*

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

Military band	30.0 to 31.0 GHz
Commercial band 1	29.0 to 30.0 GHz

#### Input Frequency

Military band	1 to 2 GHz
Commercial band 1	950 to 1950 MHz

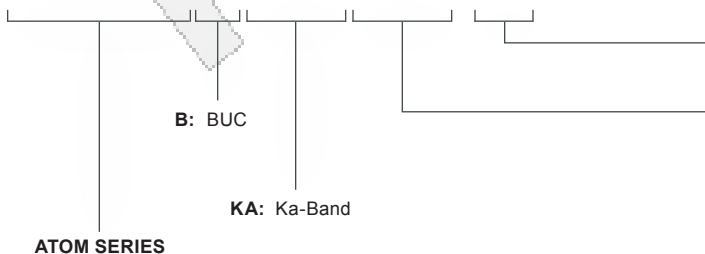
\* Custom within range

### OPTIONS

<b>Baseplate Cooling</b>	Fanless operation supporting external cooling systems
<b>Surge Protect</b>	1275D surge protection and EMI filtering
<b>Internal Reference</b>	Internal reference with auto-sensing
<b>AC Power</b>	AC power supply

### HOW TO ORDER

## ATOMBKA050-M



<b>Band</b>	M- Military C- Commercial
<b>Psat</b>	025- 25W 050- 50W



# KA-BAND 50W BUC-ATOMBKA050

## RF SPECIFICATIONS

Output Power (Psat)	47 dBm
Output Power (Plin)	> 44 dBm
Phase Noise	-72 dBc/Hz at 100 Hz -72 dBc/Hz at 1 KHz -82 dBc/Hz at 10 KHz -92 dBc/Hz at 100 KHz -102 dBc/Hz at 1 MHz
Noise Figure	15 dB
Conversion Gain	60 dB
Gain Variation over 40MHz	+/- 0.5 dB
Gain Variation over 500 MHz	+/- 1.5 dB
Gain Variation over 1000 MHz	+/- 2.0 dB
Gain Variation over temperature	+/- 2 dB
Spurious in Band	-60 dBc
Spectral Regrowth @ Plin	-30 dBc
3rd Order Intermod @ Plin	-25 dBc

## INTERFACES

Input VSRW	1.5 : 1
Output VSRW	1:5 : 1
RF Input Connector	N (50 Ω)
RF Output Connector	WR-28

## MONITOR & CONTROL

<b>Discrete Mute Control Voltage ranges</b>	
Low	0 - 0.8 V
High	3.0 - 5.0 V
Fully programmable	
Mute enable can be high or low	
Mute default can be enabled or disabled	
<b>Thermal shutdown control threshold</b>	+85°C
<b>Temperature Monitor Accuracy</b>	± 3°C
<b>Monitor/Control Connector</b>	MIL-26482 Series 1 Shell size 12, 10 pins
<b>M&amp;C Connector (Ethernet)</b>	RJ-45
<b>M&amp;C Signaling</b>	RS-485 or Ethernet

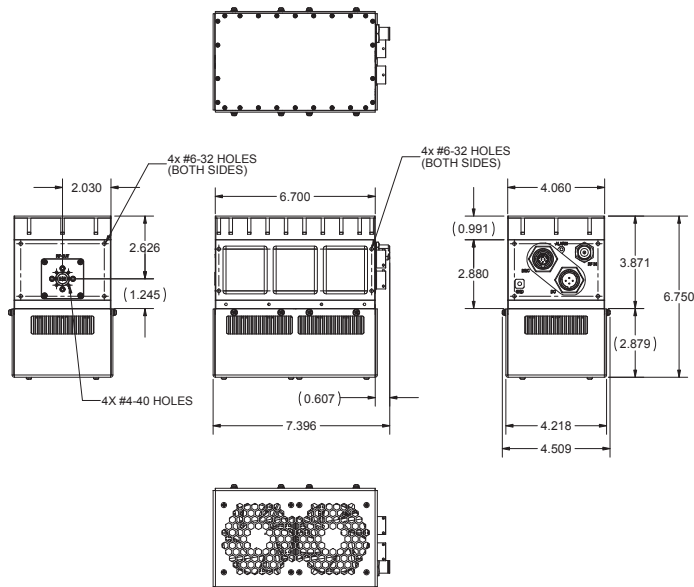
## ENVIRONMENTAL & PHYSICAL

Operating Temperature	-40 to +60°C (-40 to 140°F)
Storage Temperature	-54 to +105°C (-65° to +221°F)
Outline Dimensions	188 x 114 x 171 mm (7.4 x 4.5 x 6.75 in)
Weight	4.3 kg (9.5 lbs)
Enclosed Accessories	Screws, gasket, M&C mating connector, power mating connector

## POWER

Input Voltage	20 - 56 VDC
AC Power Supply Option	95-265 VAC, 50/60 Hz
Power Consumption (DC)	570W @ P1dB 400W @ Plin 40W muted
Power Connector (DC)	MIL-26482 Series 1
Power Connector (AC)	TBD

## MECHANICAL DIAGRAM



**Norsat**  
International Inc.

Authorized Distributor: Servsat Communications, Inc