



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

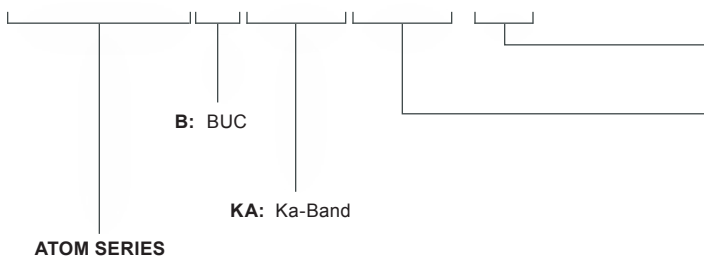
* Custom within range

OPTIONS

Baseplate Cooling	Fanless operation supporting external cooling systems
Surge Protect	1275D surge protection and EMI filtering
Internal Reference	Internal reference with auto-sensing
AC Power	AC power supply
High Temperature	For operations at 70°C

HOW TO ORDER

ATOMBKA050-M



Band	M- Military C- Commercial
Psat	025- 25W 050- 50W



KA-BAND 50W BUC-ATOMBKA050

RF SPECIFICATIONS

Output Power (typical)	47 dBm
Output Power (Plin)	> 44 dBm
Phase Noise	-68 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	18 dB min.
Conversion Gain	60 dB
Gain Variation over 40MHz	+/- 1 dB p-p
Gain Variation over 1000 MHz	+/- 3.5 dB p-p
Gain Variation over temperature	+/- 2 dB
Spurious in Band	> 55 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

Discrete Mute Control Voltage ranges	
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	
Thermal shutdown control threshold	+85°C
Temperature Monitor Accuracy	± 3°C
Monitor/Control Connector	MIL-26482 Series 1 Shell size 12, 10 pins
M&C Connector (Ethernet)	RJ-45
M&C Signaling	RS-232, 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	176 x 115 x 174 mm (6.9 x 4.5 x 6.9 in)
Weight	3.4 kg (7.5 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)	460W @ P1dB 300W @ Plin 30W muted
Power Connector (DC)	MIL-26482 Series 1
Power Connector (AC)	TBD

MECHANICAL DIAGRAM

