

### **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 ATOMBKU014BCEX B: BUC S: SSPA KU: Ku-Band ATOM SERIES HOW TO ORDER

## 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<br>-82 dBc/Hz at 10 KHz<br>-92 dBc/Hz at 100 kHz<br>-102 dBc/Hz at 1 MHz |
| Fwd Monitor (15 dB Range) @ CF       | <u>+</u> 1.0 dB  |
| Conversion Gain                      | 60 dB min  |
| Gain Variation over operating band   | 8 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               | -50 dBc  |
| AM/PM Conversion @2dB below<br>power | 3.5°/dB rated  |
| 2nd Harmonic @ 3dB below rated power | -45 dBc  |

### **ENVIRONMENTAL & PHYSICAL**

| Operating Temperature with fans  | -40 to +60°C (-40° to +140°F)                                   |
|----------------------------------|---|
| Storage Temperature              | -54 to +80°C (-65° to + 176°F)                                  |
| Outline Dimensions               | 170 x 86 x 157 mm<br>(6.5 x 3.2 x 6.1")                         |
| Weight                           | 2.3 kg (5.0 lbs)  |
| Enclosed Accessories             | Screws, gasket, M&C mating<br>connector, power mating connector |
|                                  |   |
| INTERFACES                       |   |
| INTERFACES<br>RF Input Connector | N-Туре  |

### **MONITOR & CONTROL**

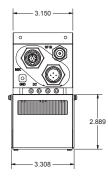
| M&C Interface                | RS-232 & RS-485   |
|------------------------------|---|
| M&C Connector                | MIL-26482 Series 1 Receptacle, Shell Size 12, 10 Pins                           |
| Mute Control                 | Fully configurable (mute enable: high or low, mute default: enabled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

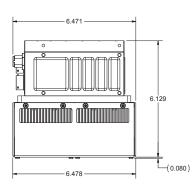
### **POWER**

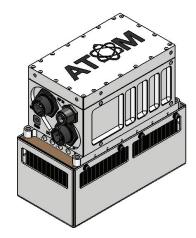
| Input Voltage               | 20 - 56 VDC  |
|-----------------------------|--|
| Power Consumption with fans | 165W @ Psat  |
|                             | 147W @ P1dB  |
|                             | 126W @ 3dB backoff from P1dB                           |
|                             | 115W @ Quiescent (no signal input)                     |
|                             | 20W muted  |
| Power Connector             | MIL-26482 Series 1 receptacle<br>Shell size 12, 4 pins |

### **MECHANICAL DIAGRAM**









**Request A Quote**