

### **Innovative Communication Solutions**

# **BUC** KU-BAND 250W ATOMBKU250



### 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
Extended band 13.75 to 14.5 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, SMA Input Connector, WR-62 Waveguide Output, 1 Phase AC

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

## **KU-BAND 250W BUC-ATOMBKU250**

### **RF SPECIFICATIONS**

 Power Output (PSAT)
 250W Typical

 (P1dB)
 200W Typical

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 1.5 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 2.5°/dB rated power

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

Component configuration 317.5 L x 330.2 W x 168.9 H mm (12.5"x 13.0" x 6.65")

Weight 15.06 kg (33.2 lbs)

### **POWER**

Input Voltage20 - 50 VDCPower Consumption with fans1010W @ Psat

880W @ P1dB 775W @ 3dB backoff from P1dB 710W @ Quiescent (no signal input)

100W muted

Power Connector MIL-26482 Series 1 receptacle

Shell size 12, 4 pins

### **INTERFACES**

RF Input Connector N-Type

RF Output Connector WR-75 (WR-62 above 15 GHz)

### **MONITOR & CONTROL**

M&C Interface 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)

 $\begin{array}{ccc} \textbf{Low} & 0.0 - 0.8 \texttt{V} \\ \textbf{High} & 3.0 - 5.0 \texttt{V} \end{array}$