

# **Innovative Communication Solutions**

# **BUC** KU-BAND 100W ATOMBKU100



## **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

LO Frequency 13.05 GHz

Extended band 13.75 to 14.5 GHz

LO Frequency 12.8 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

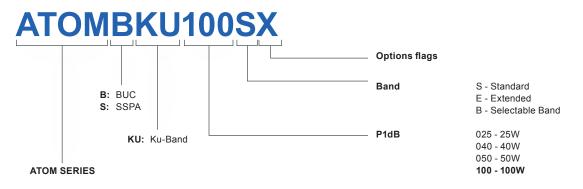
### **OPTIONS**

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

**Available options include:** Baseplate Cooling, EMI/EMC Filter, Surge+Protect Filter, Fast Switching, 3 Phase AC, SMA Input Connector, WR-62 Waveguide Output, Adjustable Group Delay

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

# **HOW TO ORDER**



# **KU-BAND 100W BUC-ATOMBKU100**

100W

15 dB

## **RF SPECIFICATIONS**

Power Output (P1dB) **Noise Figure** 

**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 60 dB min **Conversion Gain** 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** 

Storage Temperature **Outline Dimensions** 

Weight

**Enclosed Accessories** 

-40 to +60°C (-40° to +140°F)

-54 to +80°C (-65° to + 176°F)

297 L x 135 W 169 H mm (11.7 x 5.3 x 6.4")

6.9 kg (15.3 lbs)

Screws, gasket, M&C mating connector, power mating connector

## **INTERFACES**

**RF Input Connector** 

**RF Output Connector** 

N Type

WR-75 (WR-62 above 15 GHz)

### **MONITOR & CONTROL**

**M&C Interface** RS-485

MIL-26482 Series 1 Receptacle, **M&C Connector** 

Shell Size 12, 10 Pins

Fully configurable (mute enable: high or low, **Mute Control** 

mute default: enabled or disabled

Low 0.0 - 0.8V3.0 - 5.0V High

90°C (Accuracy ± 3°C) Thermal Shutdown Temperature

## **POWER**

20 - 56 VDC Input Voltage

610W @Psat (Typical) Power Consumption with fans

> 415W @ 3dB backoff from P1dB 375W @ Quiescent (no signal input)

60W muted

**Power Connector** MIL-26482 Series 1 recepticle

Shell size 12, 4 pins

### **MECHANICAL DIAGRAM**

