



# ATOMBKU040S1

## ATOM 40W Ku-Band BUC

**Frequency:** Standard: 14.0 - 14.5 GHz

**Cooling:** 1: Internal Fan

**Optional Add-Ons:** No Add-On

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.



## KEY SPECIFICATIONS

Band	Ku-Band
Band Type	S: Standard
External Ref Freq	10 MHz (sine-wave), - 5 to +5 dBm
Input Frequency Band 1	950 - 1450 MHz
LO Frequency 1	13.05 GHz
Output Frequency Band 1	14.00 - 14.50 GHz
Output Power Rated	40W

## RF SPECIFICATIONS

Gain Flatness (40mhz)	≤ 2.0 dB p-p
Gain Flatness (over Full Band)	≤ 6.0 dB p-p
Gain Flatness (over Temperature)	≤ 3.0 dB p-p
Input VSWR	2.0 : 1 max.
Linear Gain	≥ 60 dB
Noise Power Density	-65 dBm/Hz in Tx, -65 dBm/Hz in Rx
Output P1db	46 dBm min.
Output Power Psat	47 dBm min.
Output Spurious In Band	≤ -55 dBc
Output Spurious Out Of Band P1db	≤ -55 dBc
Output VSWR	2.0 : 1 max.
Phase Noise 1khz Offset Max	-72 dBc/Hz
Phase Noise 10khz Offset Max	-82 dBc/Hz
Phase Noise 100khz Offset Max	-92 dBc/Hz



Phase Noise 1000khz Offset Max -102 dBc/Hz

### ELECTRICAL SPECIFICATIONS

Power Connector MIL-26482 Series 1 receptacle, Shell Size 12, 4 Pins, 58-533723-04P  
 Power Consumption Psat 305 W max.  
 Power Requirements +18 to +56V DC

### INTERFACE SPECIFICATIONS

IF Connector N-Connector  
 RF Output Connector WR-75 waveguide grooved

### M and C SPECIFICATIONS

Mute Control Fully configurable, (mute enable: high: 3.0 - 5.0 V or low: 0.0 - 0.8 V, mute default: enabled or disabled)  
 M And C Connector MIL-26482 Series 1 receptacle, Shell Size 12, 10 Pins, 58-533723-10P  
 M And C Interface RS-485 & RS-232

### ENVIRONMENTAL SPECIFICATIONS

Humidity 100% condensing  
 IP Rating IP 65  
 Temperature Operational -40°C to +60°C  
 Temperature Storage -50 to +80°C

### PHYSICAL SPECIFICATIONS

Cooling 1: Internal Fan  
 Enclosed Accessories Screws, Gasket, M&C Connector, Power Connector  
 Product Height 193 mm  
 Product Length 169 mm  
 Product Weight 2.5 kg  
 Product Width 90 mm

### ACCESSORIES

Optional Configuration Add Ons No Add-on  
 Optional M And C Cable 10m CABLEM+C-AT10  
 Optional Power Supply PS480-AT1-(NA/UK/EU/IEC/CN/AU)

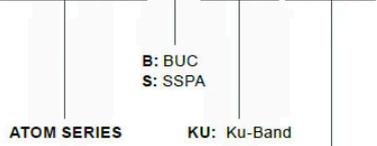
### LOGISTICS SPECIFICATIONS

HS Code	Country of Origin	Ex Works	ECCN Number	Unit Package
8517690000	Made in Canada	Richmond, BC, Canada	EAR99	

### HOW TO ORDER



## ATOMBKU040S1FIP



**OPTIONAL ADD-ONS**

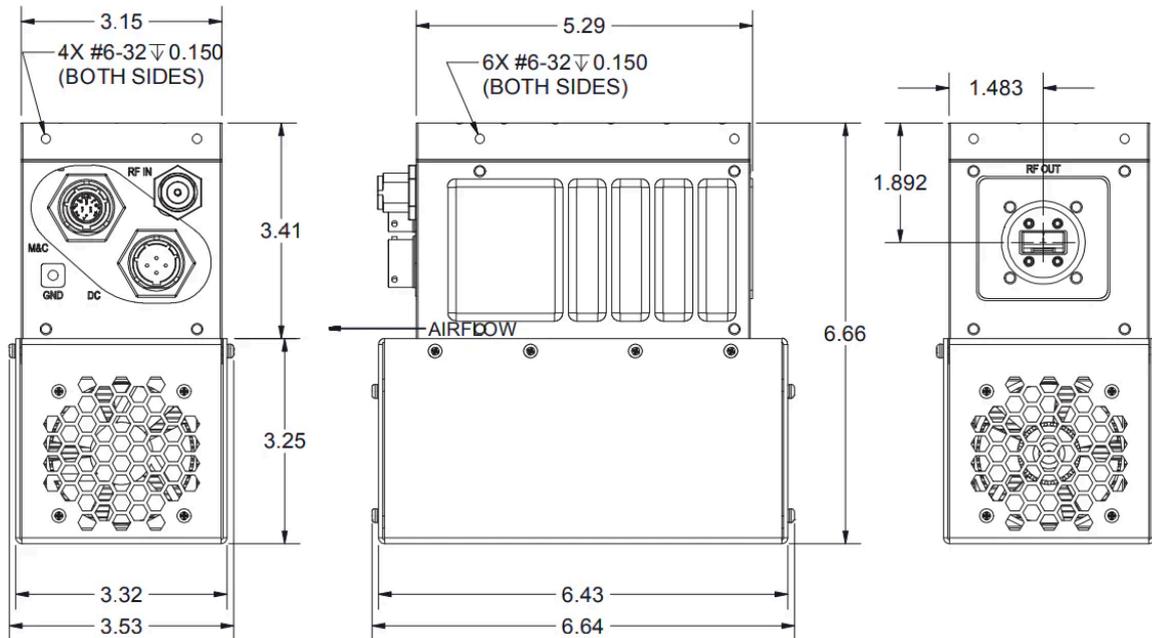
**COOLING**

**FREQUENCY**

**POWER**

- BLANK:** No Add-on
- F:** EMI/EMC Filter
- I:** Internal Reference
- P:** Surge Protection
- FI:** EMI/EMC Filter & Internal Reference
- IP:** Internal Reference & Surge Protection
- FP:** EMI/EMC Filter & Surge Protection
- FIP:** EMI/EMC Filter, Internal Reference & Surge Protection
- 1:** Internal Fan
- 2:** External Baseplate
- S:** Standard
- E:** Extended
- 040:** 40W

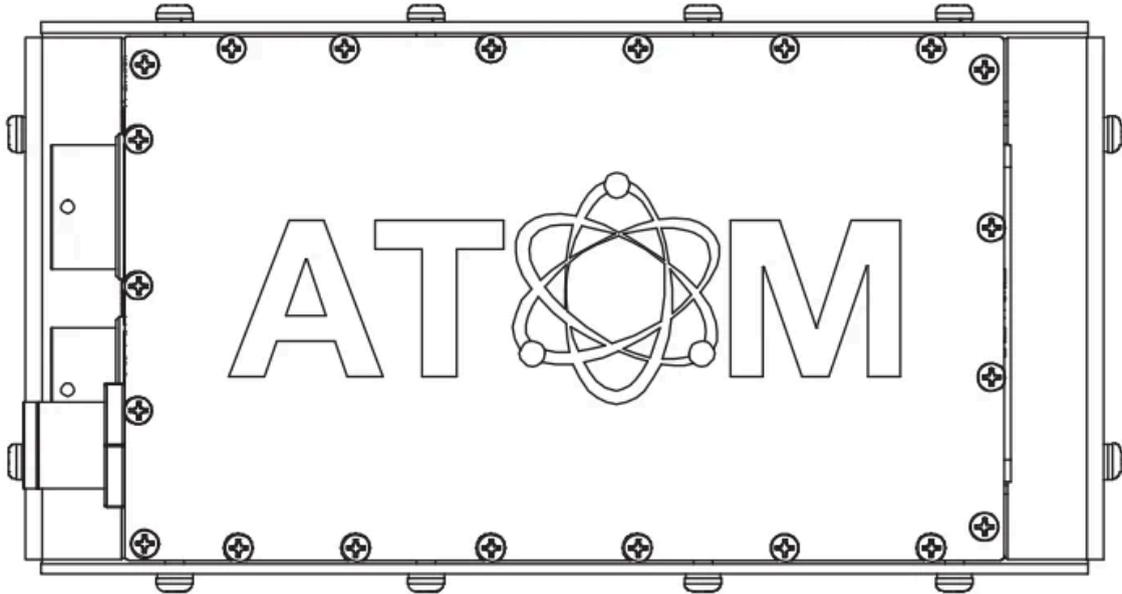
### MECHANICAL DIAGRAMS





Norsat  
International Inc.

Innovative Communication Solutions





Norsat  
International Inc.

Innovative Communication Solutions

