



# BUC GaN

## KU-BAND 40W 80W

### ATOMBKUG

#### SPECIFICATIONS



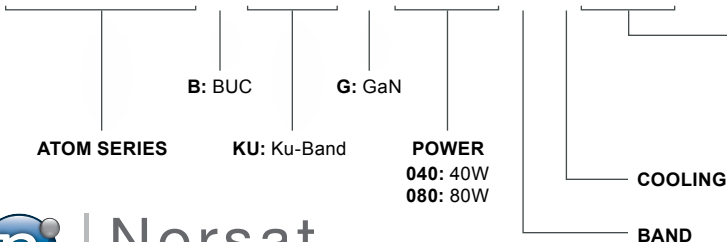
	ATOMBKUG040	ATOMBKUG080		ATOMBKUG040	ATOMBKUG080
<b>Linear Power* (P<sub>lin</sub>)</b>	43 dBm min.	46 dBm min.	<b>Input Voltage</b>	+ 18V to + 56V DC via power connector	
<b>Output Power (P<sub>sat</sub>)</b>	46 dBm min.	49 dBm min.	<b>Power Consumption</b>	195 W max.	370 W max.
<b>Phase Noise (SSB) max.</b>	-73 dBc/Hz at 1kHz -83 dBc/Hz at 10kHz -93 dBc/Hz at 100kHz -103 dBc/Hz at 1MHz		<b>Power Connector</b>	MIL-26482 Series 1 receptacle Shell Size 12, 4 Pins 58-533723-04P	
<b>Linear Gain (BUC)</b>	60 dB min., 70 dB max.		<b>Input (waterproof)</b>	Type N Connector (50 Ohm)	
<b>Gain Flatness:</b>	≤ 6.0 dB p-p		<b>Output (waterproof)</b>	WR-75 waveguide grooved	
<b>@P<sub>lin</sub></b>	≤ 1.5 dB p-p		<b>M&amp;C Interface</b>	RS-485 & RS-232 Ethernet	
<b>Over Any 40 MHz</b>	≤ 3.0 dB p-p		<b>Dimensions (L x W x H) max (With Fan)</b>	160 mm x 95 mm x 166 mm (6.59 in x 3.74 in x 6.51 in)	
<b>Over Temperature</b>	≤ -60 dBc		<b>Dimensions (L x W x H) max (Without Fan)</b>	168 mm x 85 mm x 80 mm (6.59 in x 3.35 in x 3.16 in)	
<b>Output Spurious: In-Band</b>	≤ -60 dBc		<b>Weight (With Fan)</b>	< 2.8 kg (6.2 lb)	
<b>Out-of-Band</b>	≤ -60 dBc		<b>Weight (Without Fan)</b>	< 2.3 kg (5.1 lb)	
<b>Noise Power Density</b>	-90 dBm/Hz in Tx -144 dBm/Hz in Rx		<b>Operating Temperature</b>	-40 to +60°C (P <sub>sat</sub> ) -40 to +71°C (P <sub>lin</sub> )	
<b>Input VSWR</b>	2.0 : 1 max.		<b>Storage Temperature</b>	-50 to +80°C	
<b>Output VSWR</b>	2.6 : 1 max.		<b>Humidity</b>	100% condensing	
<b>MIL-STD-810 Compliant</b>			<b>Enclosed Accessories</b>	Screws, Gasket, M&C Connector, Power Connector	

## FREQUENCY BANDS

	S: Standard	E: Extended
<b>Transmit Frequency (GHz)</b>	14.0 - 14.5	13.75 - 14.5
<b>L.O. Frequency (GHz)</b>	13.05	12.80
<b>IF Frequency (MHz)</b>	950 - 1450	950 - 1700

## HOW TO ORDER

# ATOMBKUG080S1FIP



**BLANK:** No Add-on  
**OPTIONAL ADD-ONS (80W only):**

- 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



# KU-BAND 40W 80W BUC: ATOMBKUG

## MONITOR & CONTROL

<b>M&amp;C Interface:</b>	<b>RS-485 &amp; RS-232</b>	MIL-26482 Series 1 receptacle Shell Size 12, 10 Pins 58-533723-10P
	<b>Ethernet</b>	MIL-26482 Series 1 receptacle Shell Size 10, 6 Pins 58-533722-06P
<b>Mute Control:</b>		Fully configurable (mute enable: high or low, mute default: enabled or disabled)
	<b>Low</b>	0.0 - 0.8V
	<b>High</b>	3.0 - 5.0V

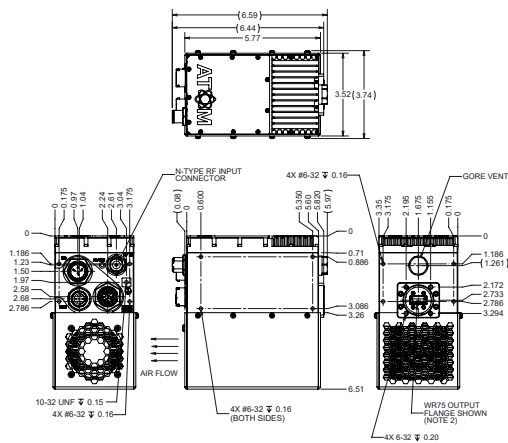
## OPTIONAL CONFIGURATION ADD-ONS (80W ONLY)

<b>EMI/EMC Filter:</b>	MIL-STD-461
<b>Internal Reference:</b>	With External 10 MHz Reference Auto-Switch
<b>Surge Protection:</b>	MIL-STD-1275D
<b>Power Supply</b>	<b>040:</b> PS300-AT1-(NA/UK/EU/IEC) <b>080:</b> PS600-AT1-(NA/UK/EU/IEC)
<b>M&amp;C Cable</b>	CABLEM+C-AT10

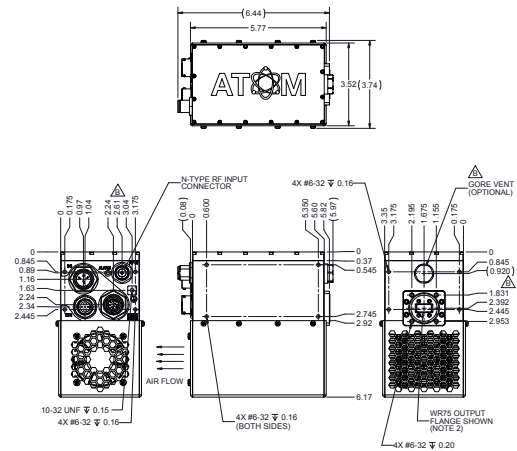
## OPTIONAL ACCESSORIES

## MECHANICAL DIAGRAM

ATOM BUC with internal fans and surge protection



ATOM BUC with internal fans



ATOM BUC with external baseplate

