

# 8-250 W Ku-BAND BUC

## ALGA high powered Ku-Band BUC

An ideal solution for both mobile and fixed Communication terminals. It is designed for high efficiency resulting in an optimal compact form factor with high performance and reliability. With the advanced customer interface and HTTP embedded web page, the operator is able to monitor and control both BUC and the System Redundancy



### WEB INTERFACE

BLOCK UP CONVERTERS AND REDUNDANT SYSTEMS

HOME CONFIG LOG HELP

BUC A Status	
Output power (dBm)	44.2
Temperature (°C)	52.0
Input voltage (Vdc)	N/A
Gain (dB)	77.0
IF Freq (MHz)	1200
Mute	Unmuted
Summary alarm	OK

Controls	
Mute	<input type="radio"/> Mute <input type="radio"/> Unmute <input type="button" value="Set"/>
Gain	<input type="text" value="Fixed"/> dB <input type="button" value="N/A"/>
IF Freq	<input type="text"/> MHz <input type="button" value="Set"/>

Alarm Details	
Out of lock	OK
RF over power	OK
Temperature	OK
Input voltage	N/A

### KEY FEATURES

- DUAL LO = same unit covers both standard and extended Ku-Band
- Extremely compact size
- 1:1 switching logic built into the BUC eliminating expensive external controller
- Built-in Telemetry facilities for critical parameters such as: RF power detection, mute control, over temperature shutdown, summary alarm
- WEB interface and SNMP monitoring
- RS 485, RS232, Ethernet and dry-contacts M&C Interface

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# HIGH POWER Ku-BAND BUC Specifications

## ELECTRICAL CHARACTERISTICS

	Standard Band	Extended Band			
Output Frequency Range	14.00 – 14.50 GHz	13.75 – 14.50 GHz			
Input Frequency Range	950 – 1450 MHz	950 – 1700 MHz			
Local Oscillator Frequency	13.05 GHz	12.80 GHz			
Gain Stability Over Temperature	± 1.5 dB nominal; ± 2.0 dB max	± 1.5 dB nominal; ± 2.25 dB max			
Gain Variation at fixed temperature	± 0.5 dB over max over 36 MHz; ± 2.0 dB over full band	± 0.75 dB over max over 36 MHz; ± 2.25 dB over full band			
Linear Gain	70 dB min.				
User Adjustable Gain	20 dB in 0.5 dB steps				
Intermodulation	-25 dBc, with 2 equal carriers at 3dB total power back off from rated power (PSAT -3dB)				
10MHz Reference	0dBm ± 5.0 dB - External via IF / (Internal 10MHz reference optional)				
	@ 100 Hz	@ 1 KHz	@ 10 KHz	@ 100 KHz	@ 1 MHz
Phase Noise Requirement		-140 dBc/Hz max	-150 dBc/Hz max	-155 dBc/Hz max	
Local Oscillator Phase Noise	-63 dBc/Hz max	-73 dBc/Hz max	-83 dBc/Hz max	-93 dBc/Hz max	-103 dBc/Hz max
Output Spurious	-55dBc max @PLinear				
Harmonics	-50 dBc max @PLinear				
VSWR	Input (1:50:1)		Output (1.20:1)		

## INTERFACE

Connectors	Power	M&C (RS232/485/Ethernet)	RF Sample	Redundancy
	MS Connector	MS Connector	N-Type Female (optional)	MS Connector
Output Interface	Waveguide, WR75G (Grooved)			
Input Interface	N-Type Female, 50 Ohms,		F-Type Female, 75 Ohms (optional)	

## MECHANICAL

See table

## ENVIRONMENTAL

Temperature Range (ambient)	Humidity	Altitude
-40°C to + 55°C (operating); -40°C to + 75°C (storage)	0 to 100% (condensing)	10,000 ft ASL

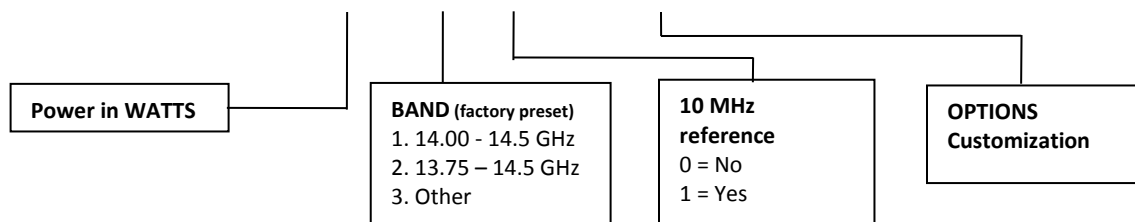
## SPECIFICATION BY BUC POWER

BUC POWER PSAT (TYPICAL) WATTS	OUTPUT POWER @P1dB (dBm)	POWER REQUIREMENT	POWER CONSUMPTION (Watts)	DIMENSIONS (in/cm)	WEIGHT (LBS/KG)
8W	+39	110 -220VAC (*1)	90	9.3 x 6.0 x 5.8 / 23.6 x 15.2 x 14.7	12.9 / 6.3
12W	+41	110 -220VAC (*1)	140	9.3 x 6.0 x 5.8 / 23.6 x 15.2 x 14.7	12.9 / 6.3
16W	+42	110 -220VAC (*1)	150	9.3 x 6.0 x 5.8 / 23.6 x 15.2 x 14.7	12.9 / 6.3
20W	+43	110 -220VAC (*1)	240	9.3 x 6.0 x 5.8 / 23.6 x 15.2 x 14.7	12.9 / 6.3
25W	+44	110 -220VAC (*1)	270	9.3 x 6.0 x 5.8 / 23.6 x 15.2 x 14.7	12.9 / 6.3
40W	+46	110 -220VAC (*1)	300	12.8 x 8.2 x 7.1 / 32.5 x 20.8 x 18.0	27.8 / 12.5
50W	+47	110 -220VAC (*1)	450	12.8 x 8.2 x 7.1 / 32.5 x 20.8 x 18.0	27.8 / 12.5
60W	+48	110 -220VAC (*1)	500	12.8 x 8.2 x 7.1 / 32.5 x 20.8 x 18.0	27.8 / 12.5
80W	+49	220VAC	850	16.0 x 16.9 x 5.2 / 41.0 x 43.0 x 13.2	47.5 / 21.6
100W	+50	220VAC	1000	16.0 x 16.9 x 5.2 / 41.0 x 43.0 x 13.2	47.5 / 21.6
125W	+51	220VAC	1200	16.0 x 16.9 x 5.2 / 41.0 x 43.0 x 13.2	47.5 / 21.6
200W	+53	220VAC	2500	16.9 x 24.5 x 9.2 / 43.0 x 62.2 x 23.4	94.1 / 42.8
250W	+53.5	220VAC	2600	16.9 x 24.5 x 9.2 / 43.0 x 62.2 x 23.4	94.1 / 42.8

(\*1) 48 VDC isolated optional

**ORDERING INFORMATION** To place an order, build your specific Ku-BAND BUC by specifying the following in your ordering number:

Ordering Number: ALTX - KU - \_\_\_\_ - \_\_\_\_ - \_\_\_\_ - OPTIONS



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