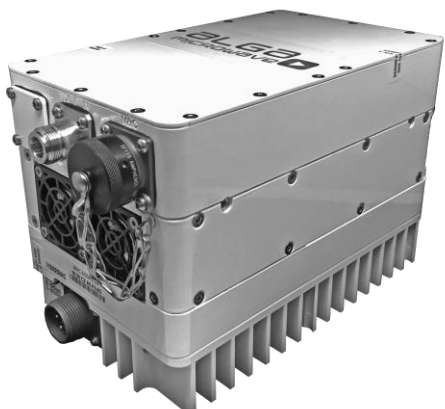
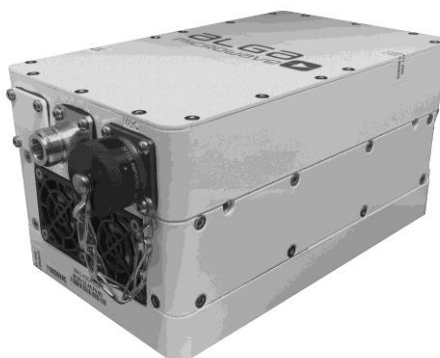


# 10 - 100W Compact C-BAND BUC

DATASHEET

## ALGA LOW COST COMPACT C-BAND BUC

The Alga low cost Compact C-band BUC is built for VSAT stabilized platforms and mobile stations, while also offering benefits for fixed site and offshore applications. Weighing less than 8 lbs, makes it ideal for feed mounting.



(Above pictures showing optional AC module)

### KEY FEATURES

- Available in AC or DC
- Offered in various C-Band (Low, Regular, Extended)
- Up to 100 W of available Power
- Up to 50 W of Linear power
- Built-in Telemetry for critical parameters such as: RF power detection, mute control, over temperature shutdown, summary alarm
- WEB interface, SNMP monitoring, RS 485, RS232, Ethernet and dry-contacts M&C Interface
- 1:1 switching logic built into the BUC eliminating expensive external controller (Optional)
- IP65 rated housing and Fan (weather proof construction)

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# Compact C-BAND BUC Specifications

ELECTRICAL CHARACTERISTICS						
	10 W	20 W	40 W	50 W	80 W GaN	100 W GaN
RF Output at P1 dB	40 dBm	43 dBm	46 dBm	47dBm		
RF Output at P Sat					49 dBm	50 dBm
RF Output at P Lin	37 dBm	40 dBm	43 dBm	44 dBm	46 dBm	47 dBm
Output Frequency Range	Lower: 5.715 – 6.425 GHz		Standard: 5.85 – 6.425 GHz		Extended: 5.875 – 6.725	
Input Frequency Range	Lower: 975 – 1675 MHz		Standard: 950 - 1525 MHz		Extended: 950 -1825 MHz	
Local Oscillator Frequency	Lower: 4.75 GHz		Standard: 4.9 GHz		Extended: 4.9GHz	
Gain Stability Over Temp.	± 2 dB nominal; ± 2.0 dB max					
Gain Variation at fixed temp	± 2.0 dB over full band;± 0.5 dB over 40 MHz					
Linear Gain	60 dB nominal					
Gain Control	20 dB Nominal In 0.5 dB Steps					
Output VSWR	1.50:1					
Intermodulation	-25 dBc, with 2 equal carriers at 3dB total power back off from rated P1dB					
10 MHz Reference	0 dBm ± 5.0 dB					
	@ 100 Hz	@ 1 KHz	@ 10 KHz	@ 100 KHz	@ 1 MHz	
10 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	-55 dBc max.					
Input Impedance	50 Ohms					
Input VSWR	1.50:1					
Power consumption (at rated power) AC Version	120W	150W	250W	300W	425W	450 W
Power requirement	120/220 AC Or +36 to +72 VDC	120/220 AC Or +36 to +72 VDC	120/220 AC Or +36 to +72 VDC	120/220 AC Or +36 to +72 VDC	120/220 AC Or +36 to +72 VDC	120/220 AC Or +36 to +72 VDC
<b>INTERFACE</b>						
Output Interface	Waveguide, WR137G (Grooved)					
Input Interface	N-Type Female, 50 Ohms					
Connectors	DC Connector : MS3102R14S-9P AC Connector : MS3102R14S-7P		M&C: MS3112E14-19P		Redundancy: 3112E14-15P (Optional)	
<b>MECHANICAL</b>						
Cooling	Forced Air					
Dimensions (L x W x H)	DC Model 7.8 x 4.72 x 4.13 in (198 x 120 x 105 mm) AC Model 7.8 x 4.72 x 5.36 in (198 x 120 x 136 mm)					
Weight	DC Model 8 lbs (3.65 kg) AC Model 9 lbs (4.1 kg)					
<b>ENVIRONMENTAL</b>						
	<b>Temperature Range (ambient)</b>		<b>Humidity</b>		<b>Altitude</b>	
	-40°C to + 55°C (operating); -40°C to + 75°C (storage)		0 to 100% (condensing)		10,000 ft ASL	

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

Ordering Number: **ALTX** – **AAAABBY** – **60** – **16** – **CCC** – **XXXX**

<b>AAAA:</b> Band	<b>BBY:</b> RF Power Level	<b>CC:</b> DC Supply	<b>XXXX:</b> Options
5764 Lower C Band	40 (10 W GaAs)	448 (36 – 72 VDC)	1050 M&C
5964 Regular C Band	43 (20 W GaAs)	7 (120/220 AC)	1051 M&C and Redundant Ready
5967 Extended C Band	46 (40 W GaAs)		
	47 (50 W GaAs)		
(Other Band Are available)	49G (80 W GaN)		
	50G (100 W GaN)		

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