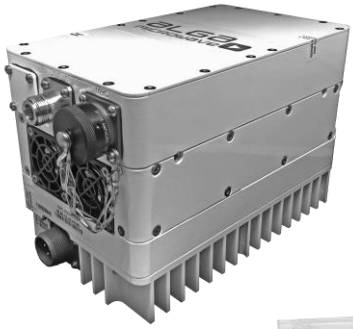
DATASHEET

8 - 50 W Ku-BAND BUC

Compact Ku-BAND BUC Specifications

ALGA LOW COST COMPACT KU-BAND BUC

The Alga low cost Compact Ku-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**
- **Up to 50 W of available Power**
- **Up to 25 W of Linear power**
- **Dual LO (Switchable).**
  Covers both regular and ext. Ku
- **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)**

ELECTRICAL CHARACTERISTICS							
	8 W	**12 W**	**16 W**	**25W**	**25 W GaN**	**40 W GaN**	**50 W GaN**
RF Output at P1 dB	39 dBm	41 dBm	42 dBm	44 dBm			
RF Output at P Sat					44 dBm	46 dBm	47 dBm
RF Output at P Lin	36 dBm	38 dBm	39 dBm	41 dBm	41 dBm	43 dBm	44 dBm
Output Frequency Range	Lower: 12.75 – 13.25 GHz;		**Standard: 14.00 - 14.50 GHz;**		Extended: 13.75 - 14.50 GHz		
Input Frequency Range	Lower: 950 - 1450 MHz;		**Standard: 950 - 1450 MHz;**		Extended: 950 - 1700 MHz		
Local Oscillator Frequency	Lower: 11.80 GHz;		**Standard: 13.05 GHz ;**		Extended: 12.80 GHz		
Gain Stability Over Temperature	± 2 dB nominal; ± 2.0 dB max						
Gain Variation at fixed temperature	± 2.0 dB over 40 full band;± 0.5 dB over 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	-130 dBc/Hz max	-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)	85W	100W	170W	190W	150W	250W	275W
Power requirement	110 /220 AC Or +36 to +72 VDC						
INTERFACE							
Output Interface	Waveguide, WR75G (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)		
MECHANICAL							
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)						
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		

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

Ordering Number: ALTX – AAAABBY – 65 – 16 – CCC – XXXX

AAAA: Band	BBY: RF Power Level	CCC: DC Supply	XXXX: Options
1213 Lower Ku Band 1314 Extended Ku Band **1414 Regular Ku Band**	39 (8 W GaAs) 41 (12 W GaAs) 42 (16 W GaAs) 44 (25 W GaAs) 44G (25 W GaN) 46G (40 W GaN) 47G (50 W GaN)	448 (36 – 72 VDC) 7 (110 /220 VAC) "Other voltage available upon request"	1050 M&C 1051 M&C and Redundant Ready