

# Lite-Line

## Ku Band GaAs BUC

### Overview

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The LITE 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 5 lbs. makes it ideal for feed mounting.

### Features

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- Extremely compact size
- From 8W to 16W P1db
- 4.7 x 4.7 x 4.0 inches
- 4.6lbs only
- Dual LO (Switchable). Covers both regular and extended Ku-Band
- Superior phase noise, exceeding IESS308/309



**Dual LO  
(Switchable)**



## Lite-Line Ku Band GaAs BUC

Technical Specifications					
Ku-Band					
Electrical Characteristics	8W	10W	12W	16W	
RF Output at 1 dB GCP	+39 dBm	+40 dBm	+41 dBm	+42 dBm	
Output Frequency Range	Low Ku: 12.75 – 13.25 GHz	Standard Ku: 14.00 – 14.50 GHz	Extended Ku: 13.75 – 14.50 GHz		
Input Frequency Range	Low Ku: 950 – 1450 MHz	Standard Ku: 950 – 1450 MHz	Extended Ku: 950 – 1700 MHz		
Local Oscillator Frequency	Low Ku: 11.8 GHz	Standard Ku: 13.05 GHz	Extended Ku: 12.80 GHz		
Gain Stability Over Temp.	± 1.5 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	65 dB nominal				
Gain Control	20 dB nominal in 0.5 dB steps				
Output VSWR	1.20:1				
Intermodulation	-25 dBc, with 2 equal carriers at 3dB total power back off from rated power				
10MHz Reference	0 dBm ± 5.0 dB				
	<b>@ 100 Hz</b>	<b>@ 1 KHz</b>	<b>@ 10 KHz</b>	<b>@ 100 KHz</b>	<b>@ 1 MHz</b>
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 requirement	+20 to +72 VDC				
Power consumption (at rated power)	85W	90W	110W	120W	
<b>Interface</b>					
Output Interface	Waveguide, WR75G (Grooved)				
Input Interface	N-Type Female, 50 Ohms				
<b>Mechanical</b>					
Cooling	Forced Air				
Dimensions (L x W x H)	4.7 x 4.7 x 4.0 in (120 x 120 x 102 mm)				
Weight	4.6 lbs (2.1 kg)				
<b>Environmental</b>					
<b>Temperature Range (ambient)</b>		<b>Humidity</b>		<b>Altitude</b>	
-40°C to + 55°C (operating)		0 to 100% (condensing)		10,000 ft ASL	
-40°C to + 75°C (storage)					

Ref.: PB-AWT-Lite-Ku-GaAs-19120

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