

High Performance 5/10/16 watt X-Band Split BUCs

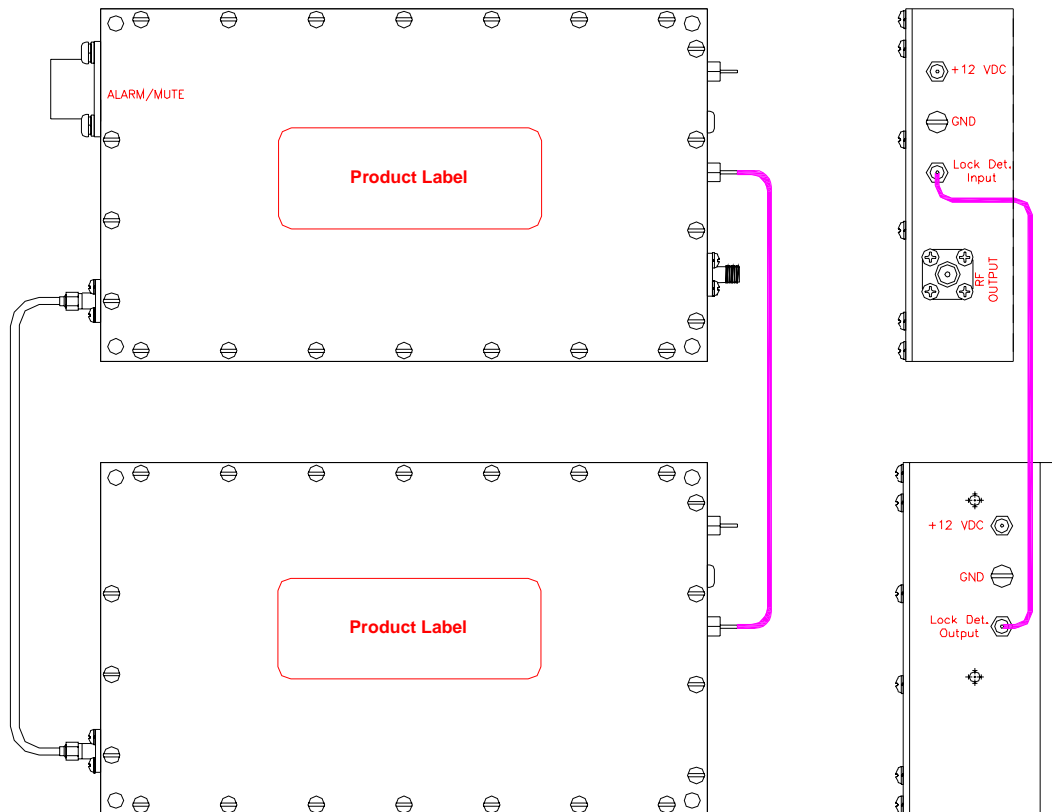
General Information

Intended for Manpack applications, Locus Microwave, Inc.'s UB61003 Block Upconverters are designed for use in commercial, military and military Manpack miniature satcom systems. This compact split unit can be mounted for maximum efficiency of operation in a customer supplied package with provision for adequate heatsinking.

Features:

- Split configuration
- Light Weight (~3.5 pounds)
- Planar SSPA Package
- MIL-STD-188-164A Phase Noise
- 5/10/16 watt Output Power choices
- L Band IF Input
- Internal image filtering included
- Integral Monitor/Alarm

Typical Configuration





	Range	Units	Notes
Electrical Specifications			
Input Frequency	950-1450	MHz	
Output Frequency	7.90-8.40	GHz	
Local Oscillator Frequency	6.95	GHz	Phase Locked
External Reference			
Frequency	10	MHz	
Level	0 dBm +/-5 dB		
Phase Noise (SSB)			per MIL-STD-188-164A
@ 1 kHz offset	-73 max., -76 typ.	dBc/Hz	
@ 10 kHz offset	-83 max., -94 typ.	dBc/Hz	
@ 100 kHz offset	-95 max., -105 typ.	dBc/Hz	
Gain	50 min., 55 typ.	dB	consult factory for other gain levels
Gain Flatness	+/-1.25 max.	dB	per full band
Gain Slope	+/-0.4 max.	dB	per 40 MHz
Stability over temperature	+/- 2.0	dB	
P _{1dB} (-037/-040/-042)	+36.5/+39.5/+41.0 min.	dBm	
P _{sat} (-037/-040/-042)	+38.0/+40.5/+42.0 typ.	dBm	
Third Order Intermodulation Distortion	-25 max.	dB	@ 3 dB backoff relative to rated P _{1dB}
Noise Figure	12 nom.	dB	
Input VSWR	1.70 typ., 2.00 max.	:1	
Output VSWR	1.25 typ., 1.40 max.	:1	Isolator Included
Overdrive	+0 max.	dBm	non-damaging
Spurious, Signal Related (@ rated output)	-60 max.	dBc	within rated output band
Spurious, Signal Independent (@ rated output)	-60 max.	dBc	outside of band
M&C Function (optional)	Mute, Temp. Monitor, Fault		optional
Power Requirement			
Input Voltage	+12.0 nom.	vdc	
Input Current (-037/-040/-042)	3.8/5.6/6.8 nom.	amps	
Mechanical Specifications			
Size, SSPA Module	6.00 x 3.50 x 1.06	inches	L x W x H
Size, BUC Module	6.00 x 3.50 x 1.55	inches	L x W x H
Weight	3.5 nom.	lbs.	
Finish	passivated aluminum		
Connectors			
IF Input/Ext. Reference/DC, RF Output	Type SMA	Female	
+12 VDC Input	RFI Solder Pin		SSPA & Converter Modules
M&C I/O	MS3112E10-6P		
Environmental			
Operating Temperature	-40 to +50	°C	Heatsink & forced air cooling required
Humidity	100	%	with condensation

Specifications are subject to change at the discretion of Locus Microwave, Inc.

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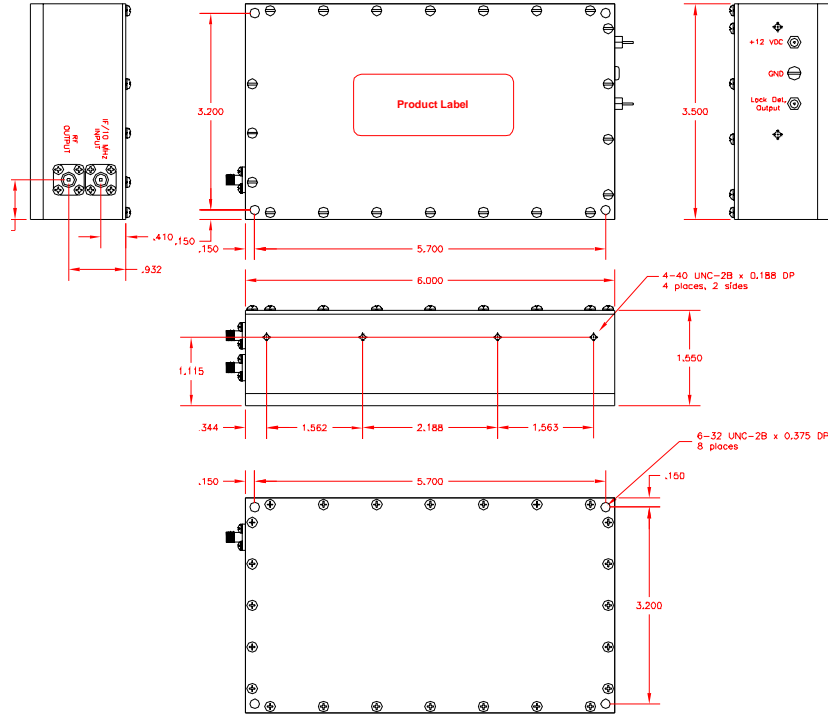
www.locusmicrowave.com

CODAN SATCOM





Outline Drawing, BUC Module



Outline Drawing, SSPA Module

