

UB61000-045/-047 30/50 Watt X-Band SSPA/Block Up Converter (BUC)

General Information

Intended for either indoor or outdoor environments, Locus Microwave, Inc., designed the UB61000 X-Band BUC for use in professional and military systems. This compact unit can be mounted on the antenna for maximum efficiency of operation.

Features:

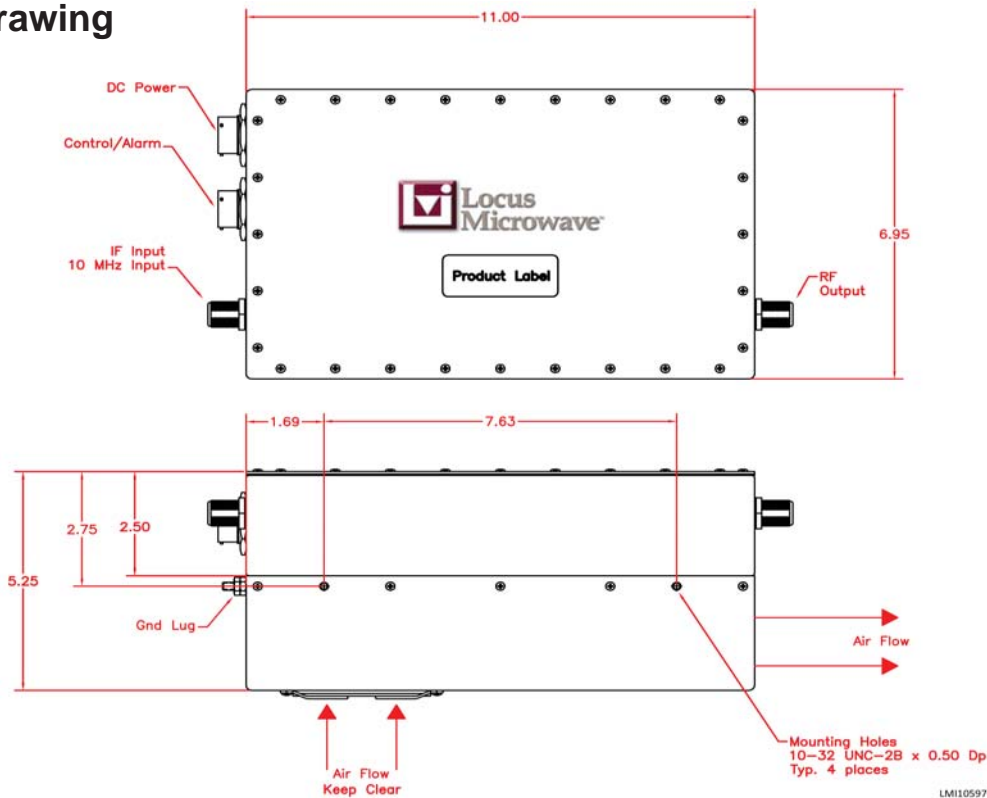
- 30 or 50 Watt Output Power
- L Band IF Input
- Outdoor Packaging
- Serial I/O Package
- Internal Image Filtering included
- Integral Monitor/Alarm



Options:

- 48 VDC or AC Power
- Internal Reference
- Waveguide Output
- Sample Port

Outline Drawing



This item is subject to International Traffic in Arms Regulations (ITAR) and is classified as 22 CFR, Part 121, Category XI (a) (5) per United States Munitions List (USML). Compliance with the Department of State ITAR is required for export of this item.

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	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., -95 typ.	dBc/Hz	
@ 100 kHz offset	-93 max., -110 typ.	dBc/Hz	
Gain	57 min., 60 typ	dB	
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} (-045/-047)	+44.0 min./46.0 typ.	dBm	
P_{sat} (-045/-047)	45.5 typ./47.2 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	Mute, Temp. Monitor, Fault		Serial I/O RS232, RS485
Power Requirement			
Input Voltage	+18 to +36	vdc	+48 vdc and AC option
Power (-045/-047)	235 nom./290 nom.	watts	
Mechanical Specifications			
Size (approximate)	11.0 x 6.80 x 5.25	inches	L X W X H
Weight	16 nom.	lbs.	
Finish	white epoxy paint		green or tan option
Connectors			
IF/Ext. Reference Input	Type N	Female	J1
RF Output, Sample Port (option)	Type N	Female	J2 (UG-51 option)
Power	MS3474W14-4P		J3
Control/Alarm	MS3114E14-18S		J4
Environmental			
Operating Temperature	-40 to +60	°C	
Humidity	100	%	with condensation