



# ALGA Microwave Inc.

[www.ALGA.CA](http://www.ALGA.CA)

2109 St-Regis  
 Dollard des Ormeaux, Quebec  
 H9B 2M9 Canada  
 Telephone: 514-683-6113  
 Facsimile: 514-683-3312

## Outdoor C-Band Upconverter (BUC)

<b>FEATURES:</b>	Weatherproof Pressure tested up to 10 psi	Redundancy option
	Light weight & Compact	Overtemperature Shutdown

MODEL	OUTPUT POWER at PSAT typ. [Watts]	OUTPUT POWER at P1dB min [Watts] / [dBm]	GAIN, dB Min	POWER CONSUMPTION [Watts]	Weight [lbs / kgs]	SIZE Length X Width X Height [Inches]
<b>NJALC-16</b>	16	12 W / 41 dBm	70	150	15 / 7	11 X 9.6 X 5.2 (FANLESS)
<b>NJALC-25</b>	25	20 W / 43 dBm	70	300	18 / 8	11 X 9.6 X 8.5
<b>NJALC-50</b>	50	40 W / 46 dBm	70	450	18 / 8	11 X 9.6 X 8.5
<b>NJALC-60</b>	60	50 W / 47 dBm	70	500	18 / 8	11 X 9.6 X 8.5
<b>NJALC-80</b>	80	60 W / 47.8 dBm	70	550	24 / 11	11.5 X 11.2 X 11.3
<b>NJALC-100</b>	100	80 W / 49 dBm	80	600	31 / 14	11.5 X 11.2 X 11.3
<b>NJALC-125</b>	125	100 W / 50 dBm	80	750	31 / 14	11.5 X 11.2 X 11.3
<b>NJALC-250</b>	250	200 W / 53 dBm	80	1200	65 / 29	21.3 X 18.3 X 10.2

ELECTRICAL CHARACTERISTICS	TECHNICAL SPECIFICATIONS	
Output Frequency Range,	see options	
Input Frequency Range	5.85 to 6.425 GHz, <b>options XXX</b>	
Gain flatness over any 40 MHz	950 to 1450 MHz,	
Gain flatness over full band	+/-1.0 dB max at room temperature	
Gain Variation	+/-2.75 dB max at room temperature	
Input VSWR (L-Band)	± 2.5 dB over operating temperature range	
Output Return Loss	2.0 : 1, max	
Spurious at rated power	-17dB, max	
Third order IMD (two equal tones 5Mhz apart)	-50 dBc max.	
	-34dBc max. @ 7dB back off from rated P1dB,	
	-26dBc max. @ 3dB back off from rated P1dB	
Output Phase Noise	@ 1KHz	-70 dBc / Hz
	@ 10 KHz	-80 dBc / Hz
	@ 100 KHz	-90 dBc / Hz

POWER REQUIREMENTS	
Input supply voltage	see options
	110/220 VAC ±15% (47-63 HZ) Auto Ranging 48 VDC optional for certain models

MECHANICAL CHARACTERISTICS	
IF input (L-Band) Interface	Type <b>N</b> Connector (Type <b>F</b> Connector Optional)
RF output (C-Band) Interface	CPR137 Grooved (Type N optional)
Power Input	MS3102R16-10P
M&C Interface	MS3102R20-29S
Redundant Interface	MS3102R18-1S
Temperature Operating	-40° C to +55°C
Storage	-55°C to +85°C
Humidity	100%, considering, rain 2" per hour
Altitude	10000' AMSL

Options ( XXX )	Output Frequency	( X ) 5.85 - 6.725 GHz	( X ) 6.725 - 7.025 GHz	( X ) other
	Power Supply	110 / 220 VAC	( X ) 48 VDC	( X ) other
	Input Connector	N-Type	( X ) F-Type	( X ) other
	Output Connector	CPR137 Grooved	( X ) N-Type	( X ) other
	M & C Interface	Analog (TTL )	( X ) Digital (RS 232 or 485)	( X ) other
<b>M &amp; C functions</b>	<b>Output Level control, RF Power detection, Temperature Monitor &amp; Mute Control, etc...</b>			

Note: The specifications are subject to change without notice.