

# X-Band BUC (L Band)

- Features: Weatherproof Pressure tested up to 10 psi  
 Light weight & Compact  
 Redundancy option  
 Indoor Rack Mount also available

Model	Output Power at PSAT typ. [Watts]	Output Power at P1dB min [Watts] / [dBm]	GAIN, dB Min	Power Consumption [Watts]	Weight [lbs / kgs]	Size L X W X H [Inches]
ALPAX-12	12	10 W / 40 dBm	70	160	12 / 5.5	11 X 10 X 5.8 (FANLESS)
ALPAX-25	25	20 W / 43 dBm	70	275	12 / 5.5	11 X 10 X 5.8 (FANLESS)
ALPAX-50	50	40 W / 46 dBm	70	450	15 / 7	11 X 10 X 8
ALPAX-80	80	60 W / 47.8 dBm	70	550	31 / 14	11.5 X 11.2 X 11.3
ALPAX-100	100	80 W / 49 dBm	80	600	31 / 14	11.5 X 11.2 X 11.3
ALPAX-125	125	100 W / 50 dBm	80	800	31 / 14	11.5 X 11.2 X 11.3
ALPAX-200	200	150 W / 52 dBm	80	1000	65 / 29	21.3 X 18.3 X 10.2
ALPAX-250	250	200 W / 53 dBm	80	1200	65 / 29	21.3 X 18.3 X 10.2
ALPAX-400	400	300 W / 55 dBm	80	2200	88 / 40	24.3 X 18.3 X 11.9
ALPAX-500	500	400 W / 56 dBm	80	2400	88 / 40	24.3 X 18.3 X 11.9

Electrical Characteristics	Technical Specifications	
Output Frequency Range,	7.9 to 8.4 GHz,	
Input Frequency Range	950 to 1450 MHz, (LO. @ 6.95 GHz)	
Input 10 MHz ref. required, unless internal 10 MHz ref option is chosen options XXX	10 MHz ref. level -5 to +5 dBm	
Gain flatness over any 40 MHz	+/-1.0 dB max at room temperature	
Gain flatness over full band	+/-2.5 dB max at room temperature	
Gain Variation	± 2.5 dB over operating temperature range	
Input VSWR (L-Band)	2.0 : 1, max	
Output Return Loss (X-Band)	-17dB, max	
Spurious at rated power	-50 dBc max.	
Third order IMD (two equal tones 5Mhz apart)	-33dBc max. @ 7dB back off from rated P1dB -25dBc 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, 220 VAC only on some models

Mechanical Characteristics	
IF input (L-Band) Interface	Type N Connector
RF output (X-Band) Interface	CPR 112 Grooved
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) Other	(X) Other	(X) Other
	Power Supply	110 / 220 VAC	(X) 48 VDC	(X) Other
	Input Connector	N-Type	(X) F-Type	(X) Other
	Output Connector	WR-112 Grooved	(X) N-Type	(X) Other
	M & C Interface	Analog (TTL)	(X) Digital (RS 232 or 485)	INTERNAL 10 MHz Reference

M & C functions Output Level control, RF Power detection, Temperature Monitor & Mute Control, etc...

Note: The specifications are subject to change without notice.