

# 60-500 W C-BAND BUC



## SATELLITE COMMUNICATIONS

### THE NEW GENERATION OF MITECVSAT HIGH POWER C-BAND BUCs

Designed for high efficiency resulting in an optimal compact form factor with high performance and reliability. With the advanced customer interface and HTTP embedded web page, the operator is able to monitor and control the BUC and the System Redundancy from a web browser via a PC, Ipad or Iphone.



### KEY FEATURES

- Offered in 4 different sub-bands
- High thermal efficiency resulting in best in class MTBF
- Superior Phase noise, exceeding IESS308/309
- Internal reference Option
- Full M&C Option including RS-232, RS-485, Ethernet and SNMP
- Redundant ready; no need for an expensive external redundancy controller

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# HIGH POWER C-BAND BUC SPECIFICATIONS

## ELECTRICAL CHARACTERISTICS

Output Frequency Range	<b>Band 1:</b> 5.850-6.425 MHz; <b>Band 2:</b> 5.850-6.725 GHz; <b>Band 3:</b> 5.725-6.425 GHz; <b>Band 4:</b> 6.725-7.025 GHz;
Input Frequency Range	<b>Band 1:</b> 950-1525 MHz; <b>Band 2:</b> 950-1825 MHz; <b>Band 3:</b> 975-1675 MHz; <b>Band 4:</b> 1275-1575 MHz;
Local Oscillator Frequency	<b>Bands 1 &amp; 2:</b> 4.9 GHz; <b>Band 3:</b> 4.75 GHz; <b>Bands 4:</b> 5.45 GHz
Output VSWR	1.20:1
Linear Gain	75 dB nominal
User Adjustable Gain	20 dB in 0.1 dB steps
Gain Stability over temperature range	± 2.0 dB max.
Gain Variation at fixed temperature	<b>Over full band:</b> ± 2.0 dB <b>Over 40 MHz:</b> ± 0.5 dB
Intermodulation	-27 dBc, with 2 equal carriers at 3 dB total power backoff from rated power
10 MHz Reference	0 dBm ±5.0 dB, (External via IF Connector or Internal) Phase Noise Requirements: -135 dBc/Hz max @ 100 Hz, -140 dBc/Hz max @ 1 KHz, -143 dBc/Hz max @ 10 KHz; -143 dBc/Hz max @ 100 KHz
Local Oscillator Phase Noise	-65 dBc/Hz max @ 100 Hz; -75 dBc/Hz max @ 1 KHz; -90 dBc/Hz max @ 10 KHz; -100 dBc/Hz max @ 100 KHz ; -110 dBc/Hz max @ 1 MHz
Output Spurious	-55 dBc
Receive Band Noise Power Density	-150 dBm/Hz
Input Impedance	50 Ohms
Input VSWR	1:50:1

## INTERFACE

Output Interface	Waveguide, CPR137G (Grooved)
Input Interface	N-Type Female, 50 Ohms
Power Connector	MS Connector
M&C (RS485/RS232/Ethernet)	MS Connector
RF Sample Port	N-type, Female
Redundancy Interface	MS Connector

## MECHANICAL

Cooling	Forced Air
Dimensions (L x W x H)	Refer to table below
Weight	Refer to table below

## ENVIRONMENTAL

Temperature Range (ambient)	-40°C to + 55°C (operating); -40°C to + 75°C (storage)
Humidity	0 to 100% (condensing)
Altitude	10000 ft. ASL

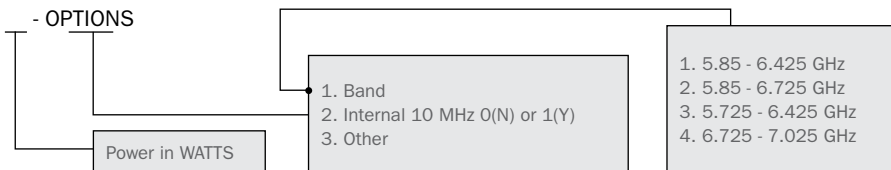
## SPECIFICATIONS BY BUC POWER

BUC POWER PSAT (TYPICAL) WATTS	OUTPUT POWER @ P1DB (dBm)	POWER REQUIREMENT	POWER CONSUMPTION (W)	WEIGHT (LBS/KG)
60W	+47	110-220VAC / 48 VDC Isolated	480	27.8/12.5
80W	+48	110-220VAC / 48 VDC Isolated	620	27.8/12.5
100W	+49	110-220VAC / 48 VDC Isolated	810	27.8/12.5
125W	+50	110-220VAC / 48 VDC Isolated	950	27.8/12.5
200W	+52	220VAC	1700	48/21.8
250W	+53	220VAC	2000	48/21.8
400W	+55	220VAC	3200	99/45
500W	+56	220VAC	3600	99/45

## ORDERING INFORMATION\*

To place an order, build your specific C-BAND BUC by specifying the following in your ordering number:

Ordering Number: ALTX - C - - OPTIONS



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