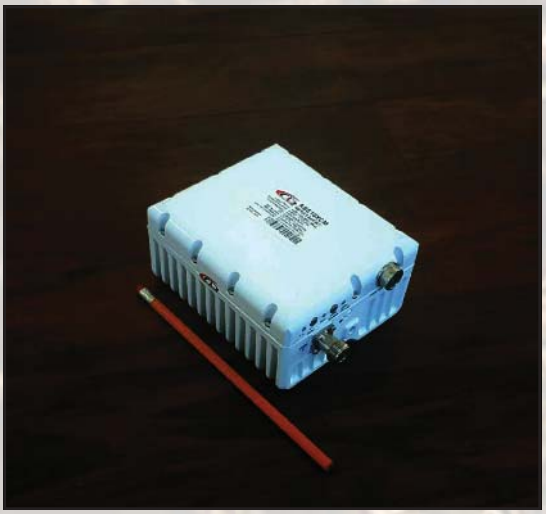
10W Full 5.85-7.05 GHz C-Band BUC

KEY FEATURES

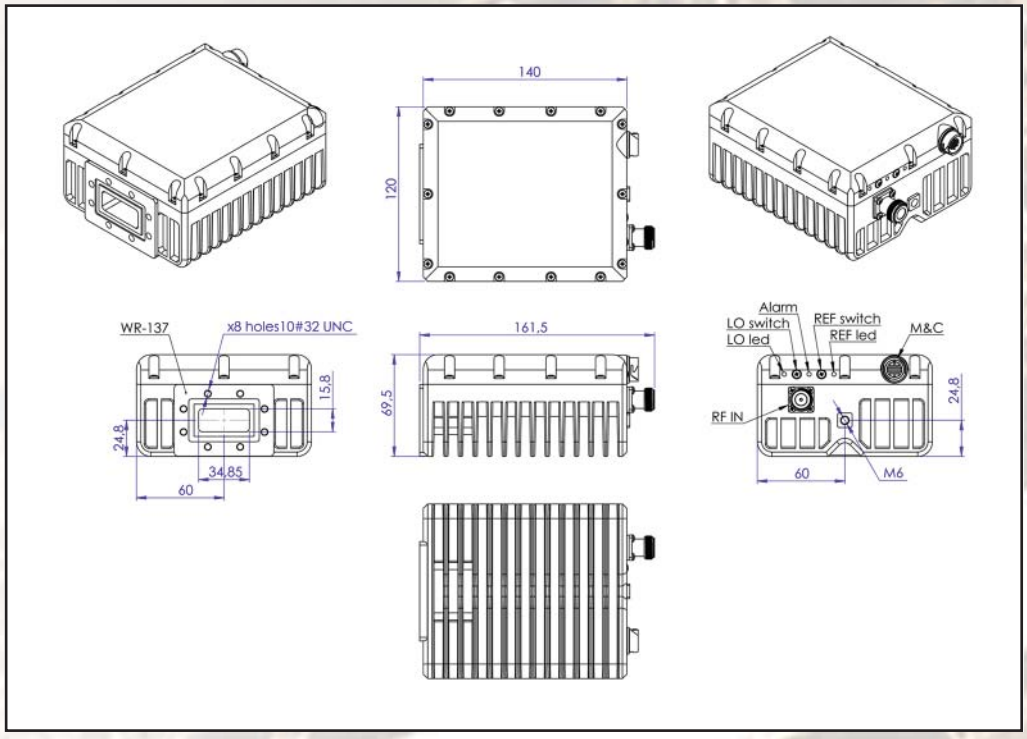
- Output frequency 5.850-7.05 GHz
- Based on GaN technology which enables high efficiency, low power consumption and high reliability.
- Double- L.O. (switchable 4.9 & 5.5 GHz)
- Incomparable low power consumption (35W max)
- Advanced M&C interface - combined RS-232/485, Ethernet (HTTP and SNMP) and optional FSK
- Auto-ranging 15-60 VDC powering option
- Digital temperature compensation
- Power and lock status LED
- Field-exchangeable (F/N) IF connector
- Internal 10MHz high stability reference (optional)
- RoHS compliant
- Three-year warranty

ABE10XCM / ABE10XCMF



This smallest and lightest 10W L-To C-Band Block Up Converter is based on GaN technology. It is designed to be mounted on the feed horn. High power efficiency resulting in the low current (<=1.5 amps @ 24 VDC). The unit covers all three C-Band sub-bands: Standard (5.850-6.425 GHz), Palapa (6.365-6.725 GHz) and Insat (6.725-7.05 GHz).

Mechanical Drawing



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TECHNICAL SPECIFICATIONS	
RF frequency	5.850 to 7.05 GHz
Dual local oscillator	4.90 and 5.50 GHz
IF frequency	950 to 1,550 MHz
Output power	10W (+40 dBm min.)
IF connector	N-type or F-type (field-exchangeable)
Power supply : auto-ranging via IF connector	+15 VDC ~ +60 VDC, 35W max.
Output interface	CPR 137 G
Gain	65 dB nominal
IMD3 (two tones)	-26 dBc max. 2 signal 5 MHz apart at P-LINEAR
L.O. leakage	-45 dBm max
Spurious	-50 dBc max
Spectral regrowth (QPSK at 1.5x and OQPSK at 1.0x symbol rate offset with 2dB back-off from rated output power)	-30 dBc
Requirement for external reference: frequency input power	**via IF cable** 10 MHz (sine-wave) -5 to +5 dBm @ input port
TX Gain variation **TX Gain stability over temperature range**	**± 0**.5 dB over 40 MHz **± 1.8** dB over full band **±** 1.5 dB typ., ± 1.8 dB max.
Phase noise (Exceeds Intelsat's standard IESS308/309)	-53 dBc/Hz max. @ 10 Hz -63 dBc/Hz max. @ 100 Hz -73 dBc/Hz max. @ 1 KHz -83 dBc/Hz max. @ 10 KHz -93 dBc/Hz max @ 100 KHz -113 dBc/Hz max @ 1 MHz
Noise power density **Transmit** **Receive**	-66 dBm/Hz (max) -157 dBm/Hz (max)
FSK	Multiplexed on TX IFL, compatible with Compech and Paradigm
M&C Interface	RS-232, RS-485 and Ethernet (HTTP and SNMP)
Noise figure	15 dB max
Input V.S.W.R.	2 : 1 max
Output V.S.W.R.	2 : 1 max.
Mute	Shut off the HPA if L.O. unlocked
Status LED **RED** **GREEN** **YELLOW** **YELLOW blinking**	Summary alarm All OK All OK standard L.O. 4.90 GHz All OK extended L.O. 5.50 GHz
Temperature range (ambient) operating storage	 -40 deg C to +55 deg C -55 deg C to +85 deg C
Vibration and shock	Complies with MIL-STD-810E
Dimensions & housing	140 (L) x 120 (W) x 69.5 (H) mm 5.51" (L) x 4.72" (W) x 2.78" (H)
Weight	1.2 kg (2.6 lbs) max

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