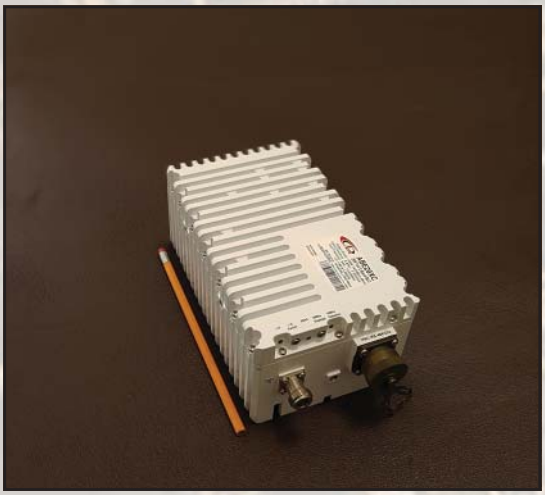
20W Fanless Full C-Band BUC

KEY FEATURES

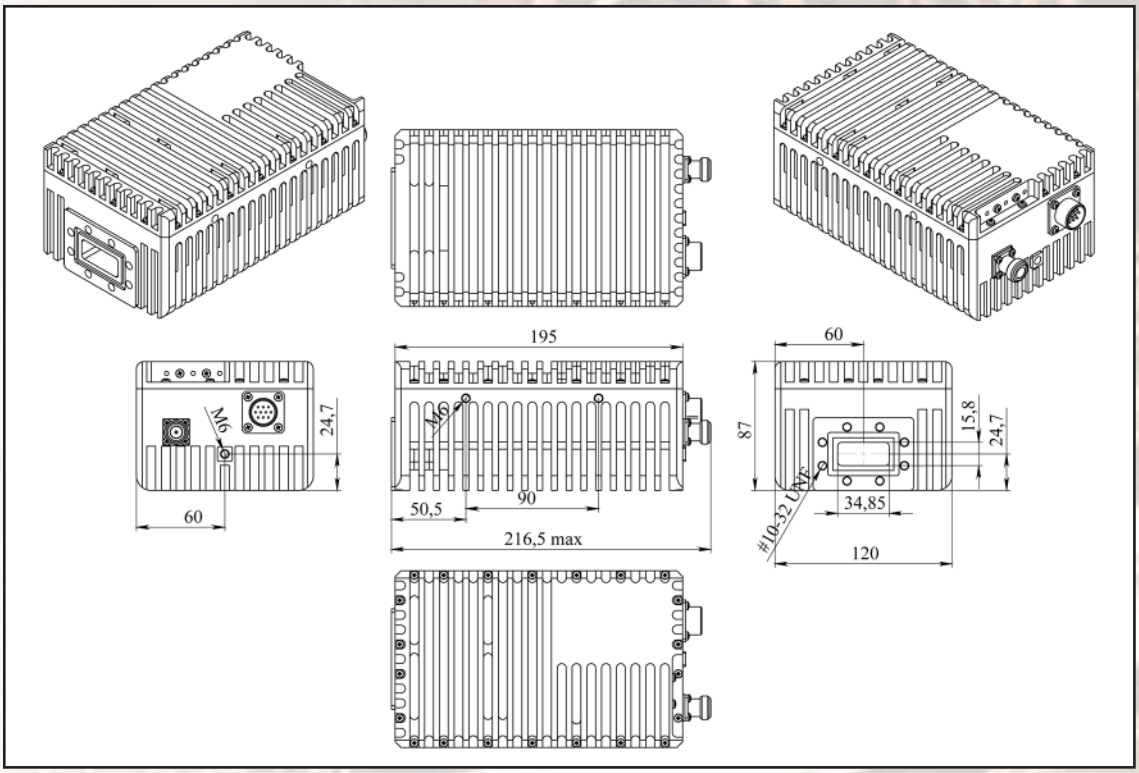
- Output frequency 5.85 - 7.025 GHz
- Double L.O. (electronically and manually switchable 4.9 & 5.2 GHz)
- Based on GaN technology which enables high efficiency, low power consumption and high reliability.
- Incomparable low power consumption (85W max.)
- Utilizing GaN technology
- Auto-ranging powering 18 - 75 VDC
- Digital temperature compensation
- Field-exchangeable (F/N) IF connector
- Advanced M&C via RS-232/485, FSK, Ethernet through HTTP and SNMP (v.2 and v.3) (optional)
- Internal 10MHz high stability reference (optional)
- Power and lock status LED
- RoHS compliant

ABE20XC / ABE20XCF



This smallest and lightest fanless 20W L-To C-Band Block Up Converter is based on GaN technology. It could be mounted directly on a feed horn. The unit covers all three C-Band sub-bands: Standard (5.85-6.425 GHz), Palapa (6.365-6.725 GHz) and Insat (6.725-7.025 GHz).

Mechanical Drawing



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TECHNICAL SPECIFICATIONS	
RF frequency	5.850 to 7.025 GHz
Dual local oscillator	4.90 and 5.20 GHz
IF frequency	950 to 1,825MHz
Output power	20W (+43 dBm min.), P-Linear 11.2W (40.49 dBm min.)
IF connector	N-type or F-type (field-exchangeable)
Power supply : auto-ranging via IF connector or MS - connector (optional)	+18 ~ +75 VDC, 85W max.
Output interface	CPR 137 G
Gain	68 dB nominal
IMD3 (two tones)	-26 dBc max. 2 signal 5 MHz apart at P-LINEAR
L.O. leakage	-45 dBm max
Spurious	-53 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)	-55 dBc/Hz max. @ 10 Hz -65 dBc/Hz max. @ 100 Hz -75 dBc/Hz max. @ 1 KHz -85 dBc/Hz max. @ 10 KHz -95 dBc/Hz max @ 100 KHz -115 dBc/Hz max @ 1 MHz
Noise power density **Transmit** **Receive**	-75 dBm/Hz (max) -157 dBm/Hz (max)
Noise figure	15 dB max
Input V.S.W.R.	1.5 : 1 max
Output V.S.W.R.	1.5 : 1 max.
Mute	Shut off the HPA if L.O. unlocked
Status LED **10MHz Reference LED** **GREEN** **GREEN blinking** **RED** **Alarm LED** **GREEN** **GREEN blinking** **RED** **L.O. LED** **GREEN** **GREEN blinking**	 External Reference - OK Internal Reference - OK Reference Alarm OK Mute Summary Alarm All OK standard 4.9 GHz All OK standard 5.2 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	216.5 (L) x 120 (W) x 87 (H) mm 8.66" (L) x 4.8" (W) x 3.48" (H)
Weight	2.76 kg (6.1 lbs) max

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