



20W Insat 6.725-7.025 GHz C-Band BUC

KEY FEATURES

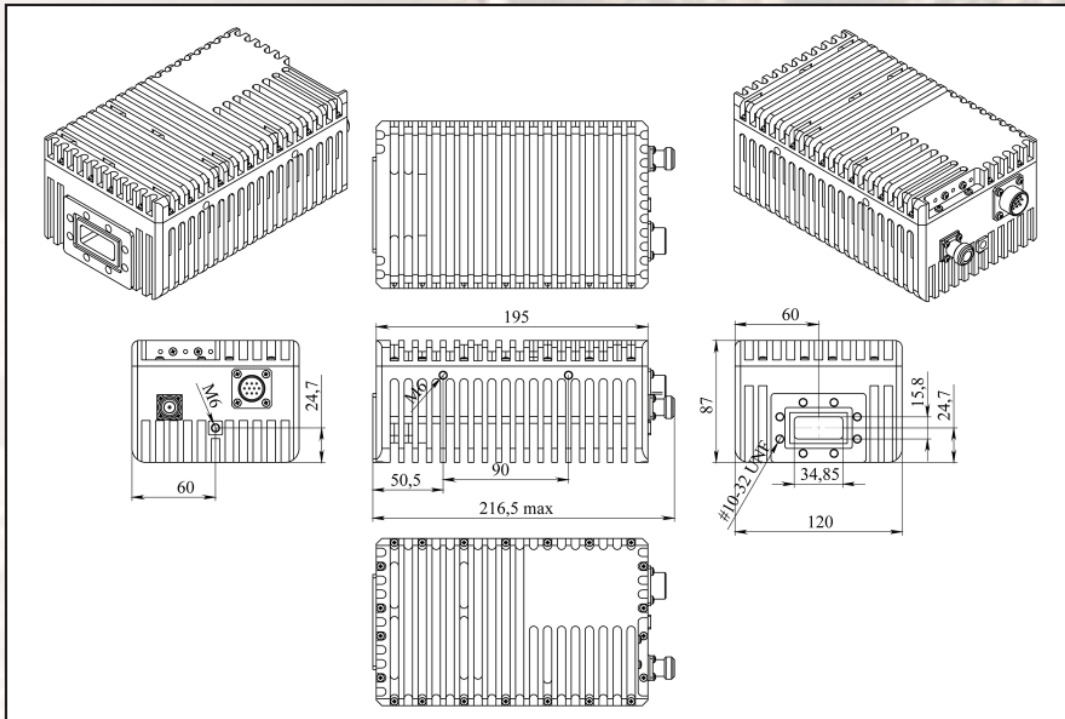
- ◆ Output frequency 6.725-7.025 GHz
- ◆ L.O. 5.76 GHz
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability.
- ◆ Incomparable low power consumption (75W max)
- ◆ Utilizing GaN technology
- ◆ Auto-ranging powering 15 - 60 VDC
- ◆ Digital temperature compensation
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Advanced M&C interface - combined RS-232/485, Ethernet (HTTP and SNMP ver. 2 and 3) and optional FSK
- ◆ Internal 10MHz high stability reference (optional)
- ◆ Power and lock status LED
- ◆ RoHS compliant

ABE20IC / ABE20ICF



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 Insat C-Band frequency(6.725-7.025 GHz)

Mechanical Drawing





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TECHNICAL SPECIFICATIONS	
RF frequency	6.725 to 7.025 GHz
Local oscillator	5.76 GHz
IF frequency	950 to 1,250 MHz
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)	+15 ~ +60 VDC 75W max.
Output interface	CPR 137 G
Gain	70 dB min.
IMD3 (two tones)	-25 dBc max. 2 signal 5 MHz apart at P-LINEAR
L.O. leakage	-25 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	± 0.5 dB over 40 MHz
TX Gain stability over temperature range	± 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 -75 dBm/Hz (max.) Receive -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 ver.2 and 3)
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 Amplifier L.O. 10MHz	RED GREEN GREEN GREEN blinking RED Summary alarm All OK All OK L.O. is set to 5.76 GHz External 10MHz reference Internal 10MHz reference No 10MHz reference detected
Temperature range (ambient) operating storage	-40 deg C to +63 deg C -55 deg C to +85 deg C
Vibration and shock	Complies with MIL-STD-810E
IP rating	IP67
Dimensions & housing	195 (L) x 120 (W) x 87 (H) mm 7.67" (L) x 4.72" (W) x 3.42" (H)
Weight	2.76 kg (6.1 lbs) max.