



60W Insat 6.725-7.025 GHz C-Band BUC

KEY FEATURES

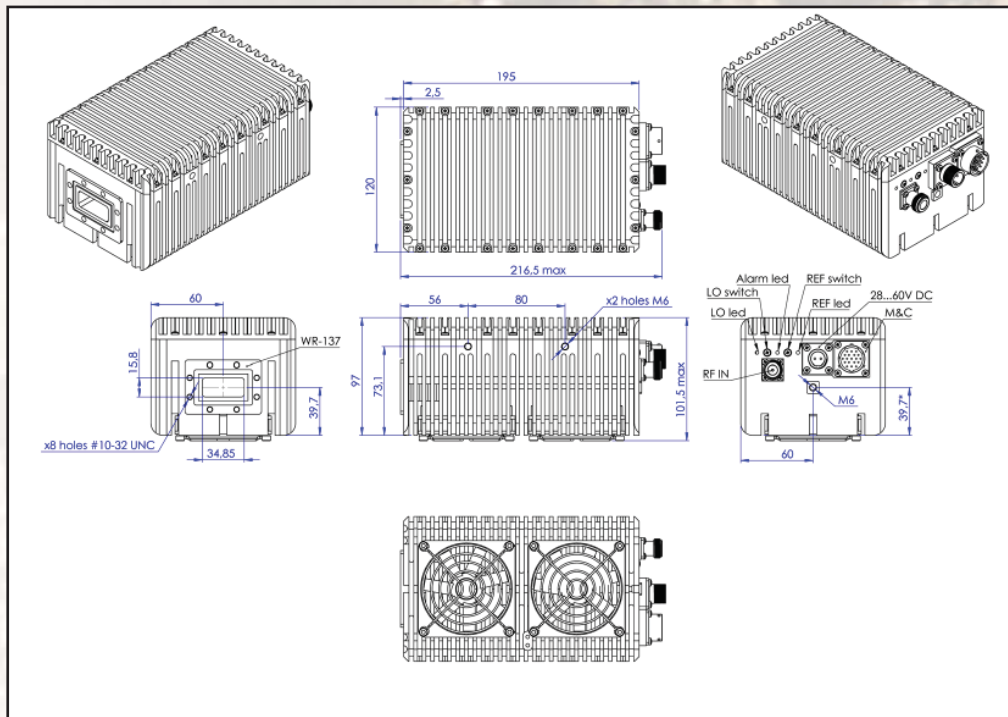
- ◆ Output frequency 6.725-7.025 GHz
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability.
- ◆ L.O. 5.76 GHz
- ◆ Incomparable low power consumption (196W max)
- ◆ Advanced M&C interface - combined RS-232/485, Ethernet (HTTP and SNMP ver. 2 and 3) and optional FSK
- ◆ Auto-ranging 36 - 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

ABC60IC / ABC60ICF



This smallest and lightest 60W L-To C-Band Block Up Converter is based on GaN technology. It is designed to be mounted on the feed horn. The unit covers C-Band sub-band Insat (6.725-7.025 GHz)

Mechanical Drawing





60W Insat 6.725-7.025 GHz C-Band BUC

TECHNICAL SPECIFICATIONS	
RF frequency	6.725 to 7.025 GHz
Local oscillator	5.76 GHz
IF frequency	965 to 1,265 MHz
Output power	60W (+48 dBm min.)
IF connector	N-type or F-type (field-exchangeable)
Power supply : auto-ranging via MS connector	+36 ~ +60 VDC, 196W 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	-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 ± 1.8 dB over full band
TX Gain stability over temperature range	± 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 -66 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 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	-40 deg C to +55 deg C
storage	-55 deg C to +85 deg C
Vibration and shock	Complies with MIL-STD-810E
Altitude	Up to 23,000 feet
Dimensions & housing	195 (L) x 120 (W) x 101.5 (H) mm
	7.67" (L) x 4.72" (W) x 3.99" (H)
Weight	3.36 kg (7.40 lbs) max