



100W Insat 6.725-7.025 GHz C-Band BUC

KEY FEATURES

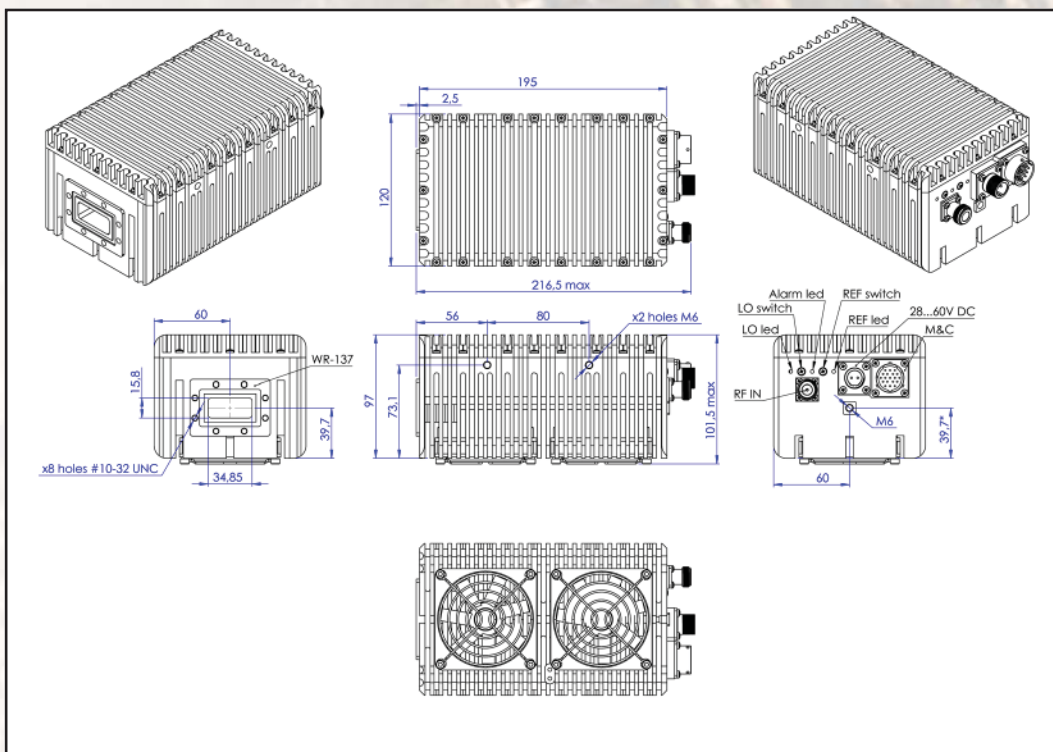
- ◆ Output frequency 6.725-7.025 GHz
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability.
- ◆ L.O. 5.76 GHz
- ◆ Incomparable low power consumption (395W max)
- ◆ Advanced M&C interface - combined RS-232/485, Ethernet (HTTP and SNMP ver. 3) and optional 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

ABC100IC / ABC100ICF



This smallest and lightest 100W 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





100W 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		100W (+50 dBm min.), P-Linear 52.6W (+47.2 dBm min.)
IF connector		N-type or F-type (field-exchangeable)
Power supply : auto-ranging via MS connector		+36 ~ +60 VDC, 395W max.
Output interface		CPR-137 G
Gain		70 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:		via IF cable
frequency		10 MHz (sine-wave)
input power		-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		-55 dBc/Hz max. @ 10 Hz
(Exceeds Intelsat's standard IESS308/309)		-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.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	RED	Summary alarm
	GREEN	All OK
L.O.	GREEN	All OK L.O. is set to 5.76 GHz
10MHz	GREEN	External 10MHz reference
	GREEN blinking	Internal 10MHz reference
	RED	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
IP rating		IP67
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.