



5W Full C-Band Block Up Converter

KEY FEATURES

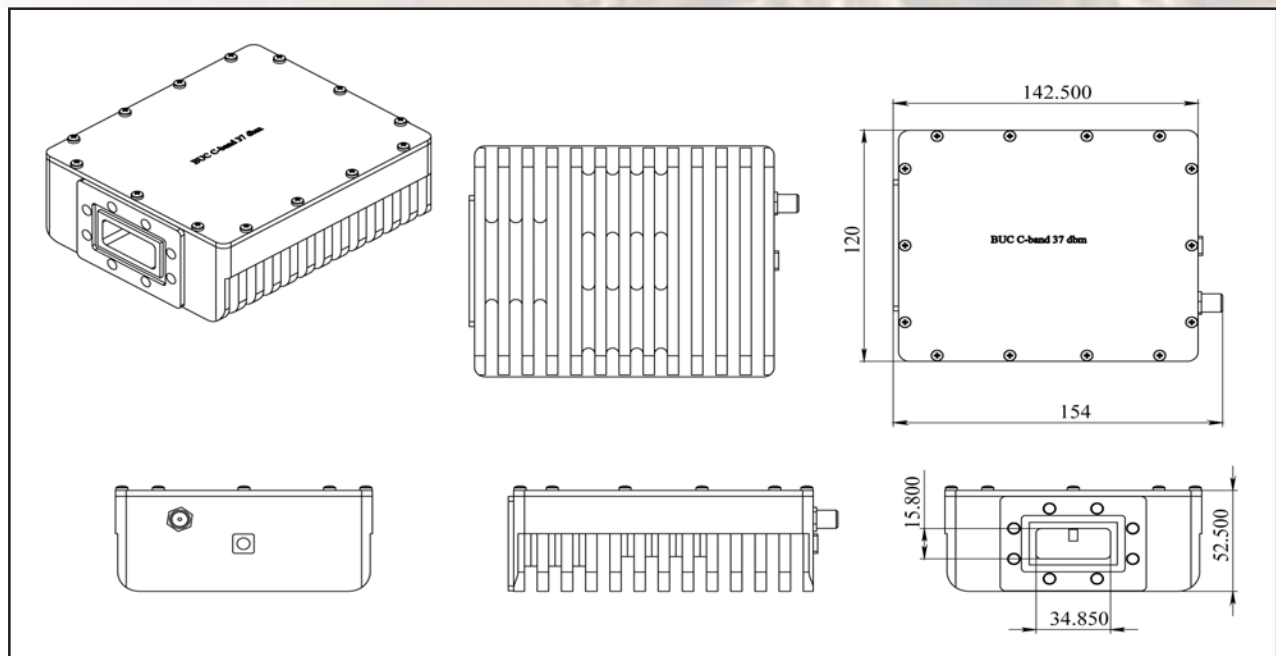
- ◆ Output frequency 5.850-7.025 GHz
- ◆ Double- L.O. (switchable 4.9 & 5.5 GHz)
- ◆ Lowest power consumption 19W @ 37dBm
- ◆ Incomparable low phase noise
- ◆ Digital temperature compensation
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Internal 10MHz reference (optional)
- ◆ L.O., alarm, lock LED
- ◆ RoHS compliant
- ◆ Three-year warranty

ABA5XC / ABA5XCF



This smallest and lightest 5W (P1dB) L-To C-Band Block Up Converter is based on GaN technology. It has been designed to be mounted on a feed horn. High power efficiency resulting in low current (≤ 1 amps). 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





5W Full C-Band Block Up Converter

TECHNICAL SPECIFICATIONS	
RF frequency	5.850 to 7.025 GHz
Local oscillator	4.90 and 5.50 GHz - switchable
IF frequency	950 to 1,550 MHz
Output power @ P1dB min over temperature	5W (+37 dBm min.)
IF connector	N-type or F-type
Power supply	+15 VDC~+28 VDC via IF cable 24W max
Output interface	CPR-137 Grooved
Input interface	N-type or F-type field exchangeable
Internal 10 MHz high stability reference	10 ⁻⁸
Gain	60 dB nominal
IMD3	-30 dBc max
L.O. Leakage	-45 dBm max
Spurious	-50 dBc max
Gain variation	0.7 dB p_p 2.0 dB p_p 2.2 dB p_p @ fixed frequency
Over operating temperature	over 40 MHz over 575 MHz
Requirement for external reference	via IF cable
frequency	10 MHz (sine-wave)
input power	-5 to +5 dBm @ input port
Phase noise	-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 -105 dBc/Hz max @ 1 MHz
Noise figure	20 dB max
Input V.S.W.R.	2 : 1 max
Output V.S.W.R.	2 : 1 max.
Mute	Shut off the BUC in case of L.O. unlocked
Status LED	Green Yellow Red
	L.O. = 4.9 GHz L.O. = 5.5 GHz Alarm
Temperature range (ambient)	
operating	-40 deg C to +55 deg C
storage	-40 deg C to +75 deg C
Dimensions & housing	142.5 (L) x 120 (W) x 52.5 (H) mm 5.61" (L) x 4.72" (W) x 2.06" (H)
Weight	1.1 kg (2.5 lbs) max