



# 5W Full C-Band Block Up Converter

## KEY FEATURES

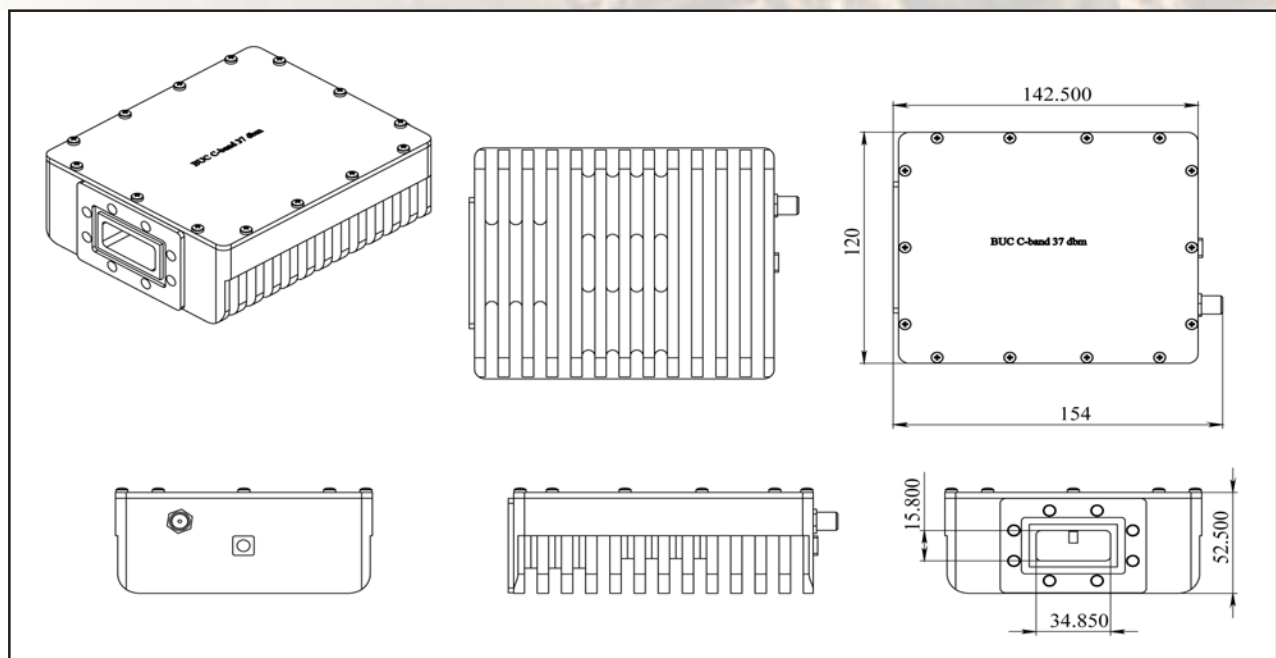
- ◆ Output frequency 5.850-7.025 GHz
- ◆ Double- L.O. (switchable 4.9 & 5.5 GHz)
- ◆ Lowest power consumption 19W @ 37dBm
- ◆ Incomparable low phase noise
- ◆ Digital temperature compensation
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Internal 10MHz reference (optional)
- ◆ L.O., alarm, lock LED
- ◆ 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 ( $\leq 1$  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

<b>TECHNICAL SPECIFICATIONS</b>	
<b>RF frequency</b>	5.850 to 7.025 GHz
<b>Local oscillator</b>	4.90 and 5.50 GHz - switchable
<b>IF frequency</b>	950 to 1,525 MHz
<b>Output power @ P1dB min over temperature</b>	5W (+37 dBm min.)
<b>IF connector</b>	N-type or F-type
<b>Power supply</b>	+15 VDC~+28 VDC via IF cable 24W max
<b>Output interface</b>	CPR-137 Grooved
<b>Input interface</b>	N-type or F-type field exchangeable
<b>Internal 10 MHz high stability reference</b>	10 <sup>-8</sup>
<b>Gain</b>	60 dB nominal
<b>IMD3</b>	-30 dBc max
<b>L.O. Leakage</b>	-45 dBm max
<b>Spurious</b>	-50 dBc max
<b>Gain variation</b>	0.7 dB p_p 2.0 dB p_p 2.2 dB p_p @ fixed frequency
<b>Over operating temperature</b>	over 40 MHz over 575 MHz
<b>Requirement for external reference</b>	via IF cable
frequency	10 MHz (sine-wave)
input power	-5 to +5 dBm @ input port
<b>Phase noise</b>	-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
<b>Noise figure</b>	20 dB max
<b>Input V.S.W.R.</b>	2 : 1 max
<b>Output V.S.W.R.</b>	2 : 1 max.
<b>Mute</b>	Shut off the BUC in case of L.O. unlocked
<b>Status LED</b>	Green Yellow Red
	L.O. = 4.9 GHz L.O. = 5.5 GHz Alarm
<b>Temperature range (ambient)</b>	
operating	-40 deg C to +55 deg C
storage	-40 deg C to +75 deg C
<b>Dimensions &amp; housing</b>	142.5 (L) x 120 (W) x 52.5 (H) mm 5.61" (L) x 4.72" (W) x 2.06" (H)
<b>Weight</b>	1.1 kg (2.5 lbs) max