

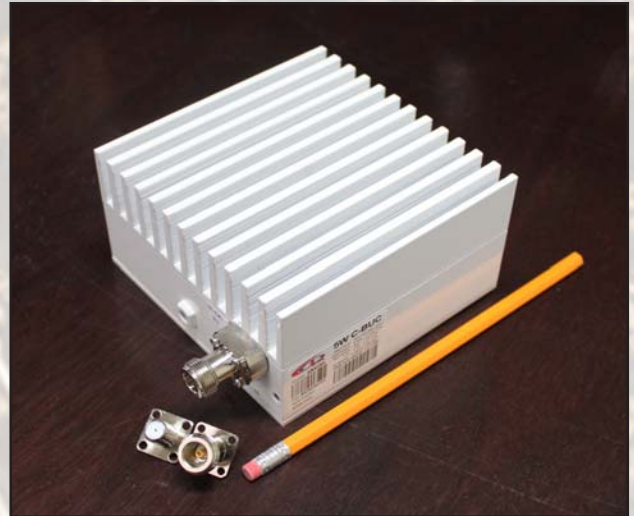


5W Full C-Band Block Up Converter

KEY FEATURES

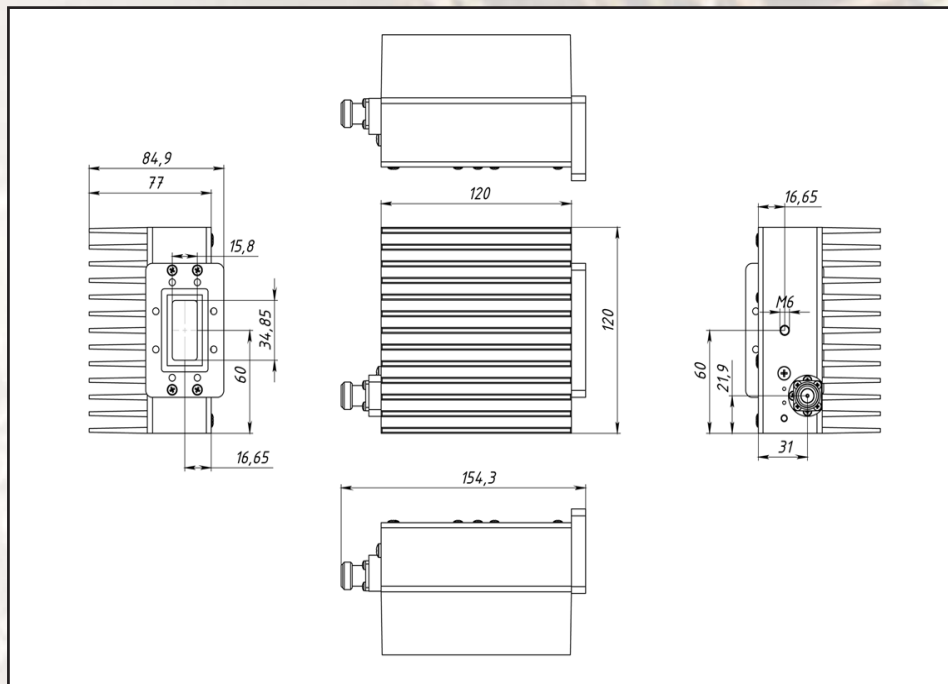
- ◆ Output frequency 5.850-7.025 GHz
- ◆ Double- L.O. (electronically and manually switchable 4.9 & 5.5 GHz)
- ◆ Lowest power consumption 19W @ 37dBm
- ◆ Incomparable low phase noise
- ◆ Digital temperature compensation
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Internal 10MHz high stability 10^{-8} reference (optional)
- ◆ Advanced M&C interface - combined RS-232/485 and optional FSK
- ◆ L.O., alarm, lock LED
- ◆ RoHS compliant
- ◆ Three-year warranty

ABA5XCM / ABA5XCMF



This smallest and lightest 5W(P1dB) L-To C-Band Block Up Converter is based on GaN technology. It is designed to be mounted on the 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	ABA5XCM	5.850 to 7.025 GHz
Local oscillator	ABA5XCM	4.90 and 5.50 GHz - switchable
IF frequency	ABA5XCM	950 to 1,525 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 24 W max
Output interface		CPR-137 Grooved
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
M&C		RS-232 and RS-485
Temperature range (ambient)		
	operating	-40 deg C to +55 deg C
	storage	-40 deg C to +75 deg C
Dimensions & housing		120 (L) x 120 (W) x 77 (H) mm 4.72" (L) x 4.72" (W) x 3.08" (H)
Weight		1.4 kg (3.00 lbs) max