



50W Full C-Band Block Up Converter

KEY FEATURES

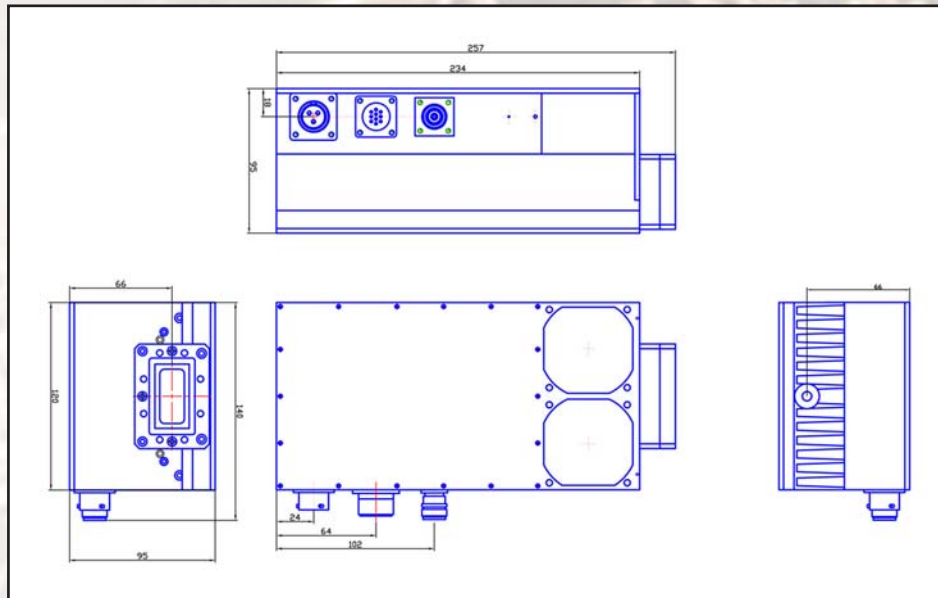
- ◆ 5.850 - 7.200 GHz output frequency
- ◆ Smallest package size and weight
- ◆ High power efficiency (50W min @P1dB over temperature)
- ◆ Double- L.O. (electronically switchable 4.9 & 5.5 GHz)
- ◆ Digital temperature compensation
- ◆ Field-exchangeable (F/N) IF connector
- ◆ 80 - 240 VAC or 38 - 56 VDC auto-ranging power (235W max)
- ◆ Power and lock status LED
- ◆ Advanced M & C interface - combined RS-232/485 and optional FSK
- ◆ RoHS compliant
- ◆ Three-year warranty

ABD50XC / ABD50XCF ABC50XC / ABC50XCF



This is a unique Full C-Band (5.850-7.200 GHz) 50W Block Up Converter powered with auto-ranging 80-240 VAC or 38-56 VDC unit, designed for mobile applications especially when an earth station needs to be able to use different C-Band (Standard, Palapa and Insat) transponders or satellites. It's light enough to be mounted on a feed horn of most antennas.

Mechanical Drawing





50W Full C-Band Block Up Converter

TECHNICAL SPECIFICATIONS

RF frequency	5.850 to 7.200 GHz
Local oscillator	4.90 and 5.50 GHz
IF frequency	950 to 1,700 MHz
Output power @ P1dB	50W (+47 dBm min.)
IF connector	N-type or F-type
Power supply via MS connector ABD50XC-auto-ranging ABC50XC-auto-ranging	80-240 VAC, 234 W max 38-56 VDC, 235 W max
Output interface	CPR 137 G
Gain	67 dB min., 76 dB max.
IMD3	-28 dBc max
L.O. leakage	-45 dBm max
Spurious	-50 dBc max
Requirement for external reference: frequency input power	via IF cable 10 MHz (sine-wave) -5 to +5 dBm @ input port
Gain variation over 40 MHz over 500 MHz	1.1 dB p_p 1.6 dB p_p
Over operating temperature	1.2 dB p_p @ fixed frequency
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
	-120 dBc/Hz max @ 1 MHz
Noise figure	15 dB max
Input V.S.W.R.	2 : 1 max
Output V.S.W.R.	2 : 1 max.
Mute	Shut off the HPA if L.O. unlocked
Status LED RED GREEN YELLOW YELLOW blinking	Summary alarm All OK All OK standard L.O. 4.90 GHz All OK extended L.O. 5.50 GHz
Input interface ABD50XC / ABC50XC ABD50XCF / ABC50XCF	50 Ohm (N-type IF in) 75 Ohm (F-type IF in)
Temperature range (ambient) operating storage	-45 deg C to +65 deg C -55 deg C to +85 deg C
Dimensions & housing	257 (L) x 120 (W) x 95 (H) mm 10.2" (L) x 4.8" (W) x 3.8" (H)
Weight	3.5 kg (7.7 lbs) max