



12W Full C-Band Block Up Converter

KEY FEATURES

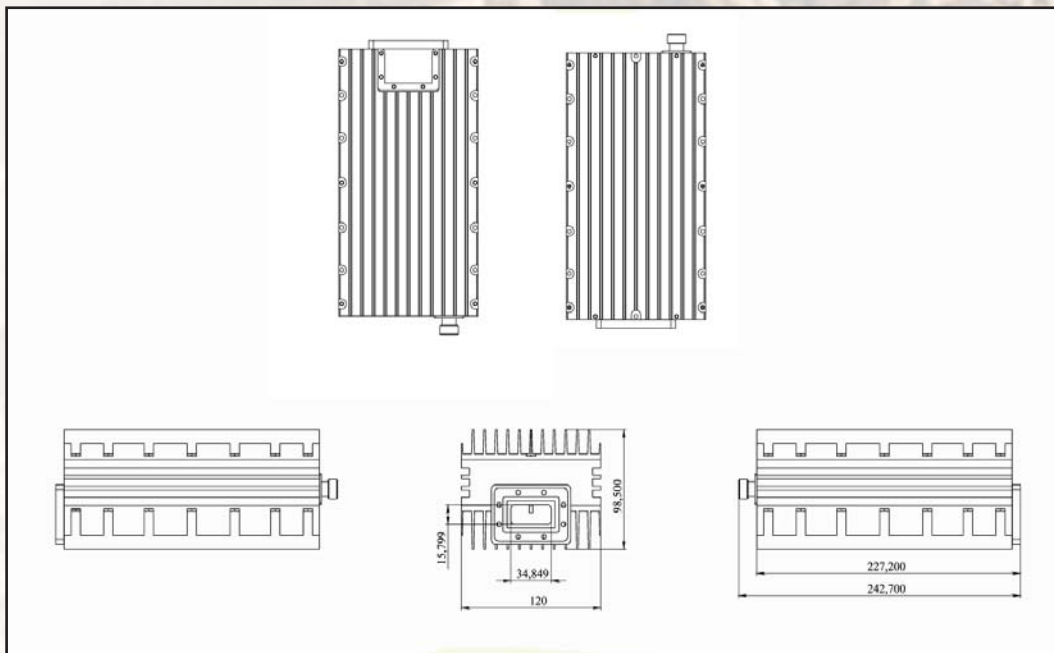
- ◆ 5.850 - 7.200 GHz output frequency
- ◆ Smallest package size and weight
- ◆ High power efficiency (12W min @P1dB over temperature)
- ◆ Double- L.O. (switchable 4.9 & 5.5 GHz)
- ◆ Digital temperature compensation
- ◆ Field-exchangeable (F/N) IF connector
- ◆ 18 - 75 VDC auto-ranging power (79W max)
- ◆ Power and lock status LED
- ◆ Optional advanced M & C- combined RS-232/485 interface and optional FSK
- ◆ Internal 10MHz high stability 10^{-8} reference (optional)
- ◆ RoHS compliant
- ◆ Three-year warranty

ABE12XC / ABE12XCF ABD12XC / ABD12XCF



This is a unique Full C-Band (5.850-7.200 GHz) 12W Block Up Converter powered with (auto-ranging) 18-75 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





12W Full C-Band Block Up Converter

TECHNICAL SPECIFICATIONS	
RF frequency	5.850 to 7.200 GHz
Local oscillator	4.90 and 5.50 GHz - switchable
IF frequency	950 to 1,700 MHz
Output power @ P1dB	12W (+41 dBm min.)
IF connector	N-type or F-type (field-exchangeable)
Power supply – auto-ranging via IF connector	18-75 VDC, 67 W max
Internal 10MHz high stability reference	10 ⁻⁸
Output interface	CPR 137 G
Gain	68 dB nominal
IMD3	-28 dBc max
L.O. leakage	-45 dBm max
Spurious	-53 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	-53 dBc/Hz max. @ 10 Hz
	-63 dBc/Hz max. @ 100 Hz
	-73 dBc/Hz max @ 1 KHz
	-83 dBc/Hz max @ 10 KHz
	-93 dBc/Hz max @ 100 KHz
	-110 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 ABE12XC / ABD12XC ABE12XCF / ABD12XCF	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	242.7(L) x 120 (W) x 98.5 (H) mm 9.55" (L) x 4.72" (W) x 3.87" (H)
Weight	2.5 kg (5.5 lbs) max