



# 15W Full C-Band Block Up Converter

## KEY FEATURES

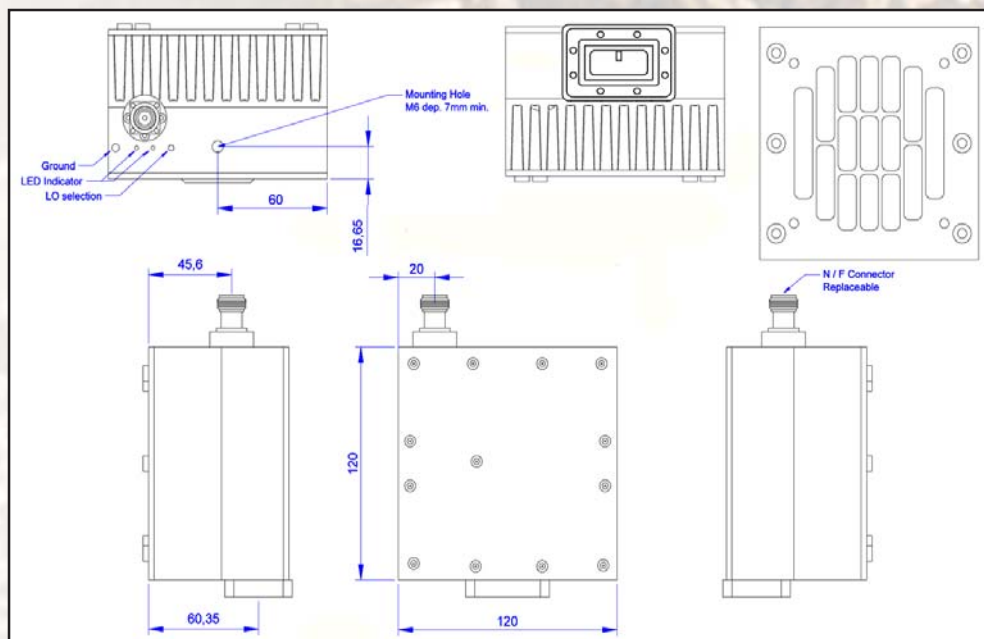
- ◆ 5.850 - 7.200 GHz output frequency
- ◆ Smallest package size and weight
- ◆ High power efficiency (15W min @P1dB over temperature)
- ◆ Double- L.O. (switchable 4.9 & 5.5 GHz)
- ◆ Digital temperature compensation
- ◆ Field-exchangeable (F/N) IF connector
- ◆ 18 - 75 VDC auto-ranging power (74W max)
- ◆ Power and lock status LED
- ◆ Optional advanced M & C- combined RS-232/485 interface and optional FSK
- ◆ RoHS compliant
- ◆ Three-year warranty

## ABE15FXC / ABE15FXCF ABD15FXC / ABD15FXCF



This is a unique Full C-Band (5.850-7.200 GHz) 15W 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





# 15W Full C-Band Block Up Converter

## TECHNICAL SPECIFICATIONS

<b>RF frequency</b>	5.850 to 7.200 GHz
<b>Local oscillator</b>	4.90 and 5.50 GHz - switchable
<b>IF frequency</b>	950 to 1,700 MHz
<b>Output power @ P1dB</b>	15W (+41.8 dBm min.)
<b>IF connector</b>	N-type or F-type (field-exchangeable)
<b>Power supply : auto-ranging via IF connector</b>	18-75 VDC, 74 W max
<b>Output interface</b>	CPR 137 G
<b>Gain</b>	68 dB nominal
<b>IMD3</b>	-28 dBc max
<b>L.O. leakage</b>	-45 dBm max
<b>Spurious</b>	-53 dBc max
<b>Requirement for external reference:</b> frequency input power	<b>via IF cable</b> 10 MHz (sine-wave) -5 to +5 dBm @ input port
<b>Gain variation</b> <b>over 40 MHz</b> <b>over 500 MHz</b>	1.1 dB p_p 1.6 dB p_p
<b>Over operating temperature</b>	1.2 dB p_p @ fixed frequency
<b>Phase noise</b>	-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
<b>Noise figure</b>	15 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 HPA if L.O. unlocked
<b>Status LED</b> 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
<b>Input interface</b> ABE15FXC / ABD15FXC ABE15FXCF / ABD15FXCF	50 Ohm (N-type IF in) 75 Ohm (F-type IF in)
<b>Temperature range (ambient)</b> operating storage	-45 deg C to +65 deg C -55 deg C to +85 deg C
<b>Dimensions &amp; housing</b>	120(L) x 120 (W) x 77 (H) mm 4.72" (L) x 4.72" (W) x 3.28" (H)
<b>Weight</b>	1.4 kg (3.0 lbs) max