



# 20W Ext. C-Band Block Up Converter

## KEY FEATURES

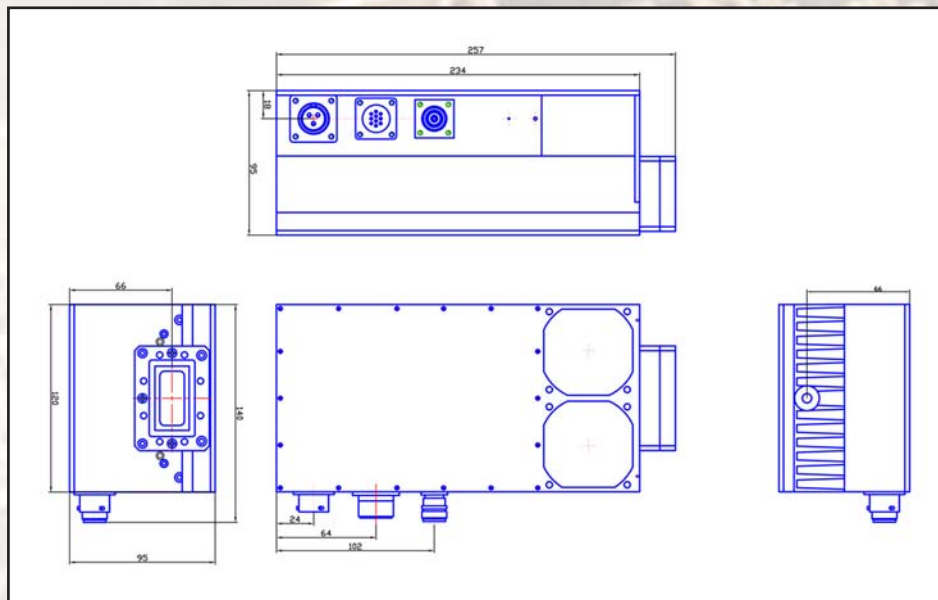
- ◆ 5.850 GHz - 6.725 GHz output frequency
- ◆ Smallest package size and weight
- ◆ High power efficiency (20W min @P1dB over temperature)
- ◆ Digital temperature compensation
- ◆ Field-exchangeable (F/N) IF connector
- ◆ 80 - 240 VAC or 38 - 56 VDC auto-ranging power (148W max)
- ◆ Power and lock status LED
- ◆ Advanced M & C interface - combined RS-232/485 and optional FSK
- ◆ Internal 10MHz high stability  $10^{-8}$  reference (optional)
- ◆ RoHS compliant
- ◆ Three-year warranty

## ABD20DC / ABD20DCF ABC20DC / ABC20DCF



This is a unique Ext. C-Band (5.850-6.725 GHz) 20W 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 and Palapa) transponders or satellites. It's light enough to be mounted on a feed horn of most antennas.

## Mechanical Drawing





# 20W Ext. C-Band Block Up Converter

<b>TECHNICAL SPECIFICATIONS</b>	
<b>RF frequency</b>	5.850 to 6.725 GHz
<b>Local oscillator</b>	4.90 GHz
<b>IF frequency</b>	950 to 1,825 MHz
<b>Output power @ P1dB</b>	20W (+43 dBm min.)
<b>IF connector</b>	N-type or F-type (field-exchangeable)
<b>Power supply via MS connector</b> <b>ABC20DC-auto-ranging</b> <b>ABD20DC-auto-ranging</b>	38-56 VDC, 148 W max 80-240 VAC, 147 W max
<b>Output interface</b>	CPR 137 grooved
<b>Internal 10MHz high stability reference</b>	10 <sup>-8</sup>
<b>IMD3</b>	-28 dBc max
<b>L.O. leakage</b>	-45 dBm max
<b>Spurious</b>	-50 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>	-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
<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> <b>GREEN</b> <b>RED</b>	L.O. locked and amplifier functioning normally Power OK, L.O. unlocked
<b>Input interface</b> ABD20DC / ABC20DC ABD20DCF / ABC20DCF	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>	257 (L) x 120 (W) x 95 (H) mm 10.2" (L) x 4.8" (W) x 3.8" (H)
<b>Weight</b>	3.5 kg (7.7 lbs) max