



# 10W Ext. C-Band Block Up Converter

## KEY FEATURES

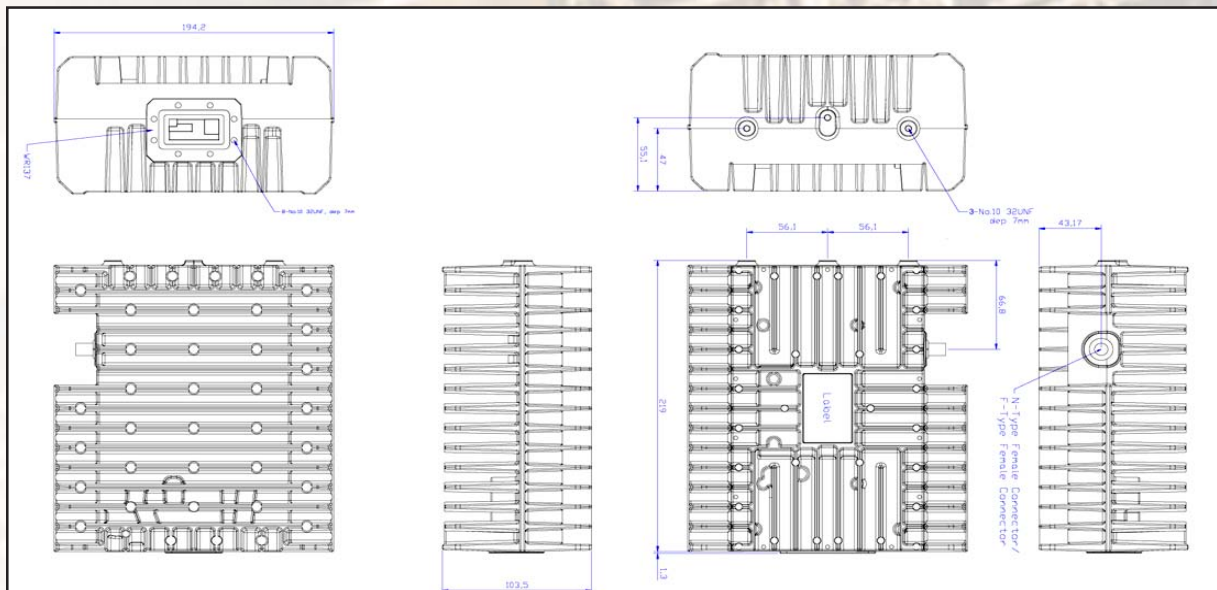
- ◆ 5.850 - 6.725 GHz output frequency
- ◆ Smallest package size and weight
- ◆ “No cooling fan” solution
- ◆ Input side connector
- ◆ Powered through IF cable option
- ◆ Low power consumption (<77W)
- ◆ High power efficiency (10W min @P1dB over temperature)
- ◆ 24VDC / 48VDC / 48VDC via MS connector input power options
- ◆ RoHS compliant
- ◆ Three-year warranty

**ABA10DC / ABA10DCF**  
**ABB10DC / ABB10DCF**  
**ABC10DC / ABC10DCF**



This small and light weight 10W L-To Ext. C-Band Block Up Converter is designed to be mounted on the feed horn. High power efficiency resulting in low current consumption allows user to pass DC supply voltage via IF cable. The unit is ideal for network and point to point, data distribution, portable and emergency applications.

## Mechanical Drawing





# 10W Ext. C-Band Block Up Converter

<b>TECHNICAL SPECIFICATIONS</b>		
<b>RF frequency</b>	<b>ABA10DC</b>	5.850 to 6.725 GH
<b>Local oscillator</b>	<b>ABA10DC</b>	4.90 GHz, non-inverting
<b>IF frequency</b>	<b>ABA10DC</b>	950 to 1.825 MHz
<b>Output power @ P1dB min over temp.</b>		10W (+40 dBm min.)
<b>IF connector</b>		N-type or F-type
<b>Power supply</b>	<b>ABA10DC</b> <b>ABB10DC</b> <b>ABC10DC</b>	+18 VDC~+24 VDC via IF cable 77 W max +36 VDC~+60 VDC via IF cable 75 W max +36 VDC~+60 VDC via MS conn. 75 W max
<b>Output interface</b>		CPR-137 G
<b>Gain</b>		54 dB min., 64 dB nominal
<b>IMD3</b>		-28 dBc max
<b>L.O. leakage</b>		-45 dBm max
<b>Spurious</b>		-50 dbc max
<b>Gain variation</b>	<b>over 50 MHz</b> <b>over 575 MHz</b>	0.7 dB p_p 2.0 dB p_p
<b>Over operating temperature</b>		2.2 dB p_p @ fixed frequency
<b>Requirement for external reference</b>		via IF cable
	frequency	10 MHz (sine-wave)
	input power	-5 to +5 dBm @ input port
<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>		20 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 BUC in case of L.O. unlocked
<b>Input interface</b>	<b>ABA10DC</b> <b>ABA10DCF</b>	50 Ohm (N-type IF in) 75 Ohm (F-type IF in)
<b>Temperature range (ambient)</b>		
	operating	-40 deg C to +55 deg C
	storage	-40 deg C to +75 deg C
<b>Dimensions &amp; housing</b>		217 (L) x 194 (W) x 103 (H) mm 8.7" (L) x 7.7" (W) x 4.1" (H)
<b>Weight</b>		4.2 kg (9.3 lbs) max