



# 10W Ku-Band Block Up Converter

## KEY FEATURES

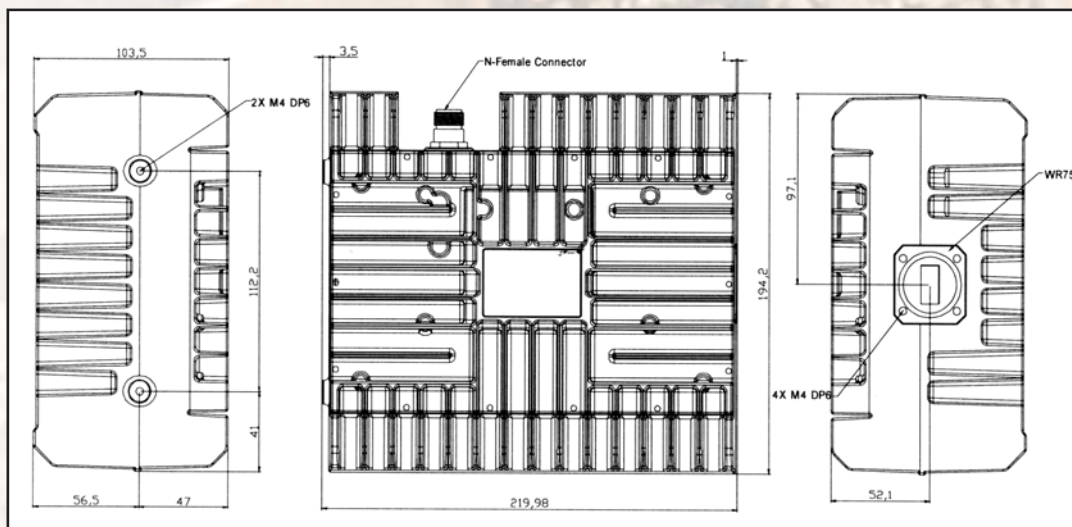
- ◆ Small package size and weight
- ◆ Feed horn mounting
- ◆ “No cooling fan” solution
- ◆ Input side connector
- ◆ Powered through IF cable
- ◆ Low power consumption (<78W)
- ◆ High power efficiency (10W min @P1dB over temperature)
- ◆ 24VDC / 48VDC / 48VDC via MS connector input power options
- ◆ RoHS compliant
- ◆ Three-year warranty
- ◆ 14.00-14.50 / 13.75-14.25 / 13.75 - 14.50 GHz options

**ABA10KU / ABA10KUF**  
**ABA10KUL / ABA10KULF**  
**ABA10KUX / ABA10KUXF**



This small and light weight 10W L-To Ku-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 or via external MS connector. The unit is ideal for network and point to point, data distribution, portable and emergency applications.

## Mechanical Drawing





# 10W Ku-Band Block Up Converter

<b>TECHNICAL SPECIFICATIONS</b>		
<b>RF frequency</b>	<b>ABA10KU</b> <b>ABA10KUL</b> <b>ABA10KUX</b>	14.00 to 14.50 GHz 13.75 to 14.25 GHz 13.75 to 14.50 GHz
<b>Local oscillator</b>	<b>ABA10KU</b> <b>ABA10KUL</b> <b>ABA10KUX</b>	13.05 GHz 12.80 GHz 12.80 GHz
<b>IF frequency</b>		950 to 1,700 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>ABA10KU</b> <b>ABB10KU</b> <b>ABC10KU</b>	+18 VDC~+24 VDC via IF cable 78 W max +38 VDC~+60 VDC via IF cable 77 W max +38 VDC~+60 VDC via MS conn. 77 W max
<b>Output interface</b>		WR-75 Grooved
<b>Gain</b>		58 dB min., 72 dB max.
<b>IMD3</b>		-29 dBc max
<b>L.O. leakage</b>		-33 dBm max
<b>Spurious</b>		-50 dBc max
<b>Gain variation</b>	<b>over 54 MHz</b> <b>over 500 MHz</b>	1.5 dB p_p 2.5 dB p_p
<b>Over operating temperature</b>		2.5 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>ABA10KU</b> <b>ABA10KUF</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>		212 (L) x 192 (W) x 102 (H) mm 8.4" (L) x 7.5" (W) x 4.1" (H)
<b>Weight</b>		4.2 kg (9.3 lbs) max