

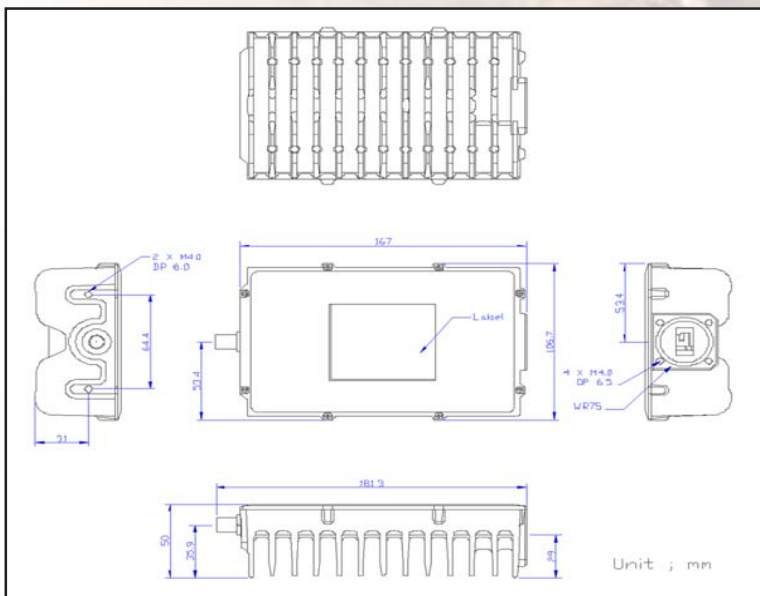


# 1W Ku-Band Block Up Converter

## KEY FEATURES

- ◆ Small package size and weight
- ◆ Feed horn mounting
- ◆ Powered through IF cable
- ◆ Low power consumption (<15W)
- ◆ High power efficiency (1W min @P1dB over temperature)
- ◆ RoHS compliant
- ◆ Three-year warranty
- ◆ 14.00-14.50 / 13.75-14.25 / 13.75-14.50 GHz options

### Mechanical Drawing



**ABA1KU / ABA1KUF**  
**ABA1KUL / ABA1KULF**  
**ABA1KUX / ABA1KUXF**



This small and light weight 1W L-To Ku-Band Block Up Converter is designed to be mounted on the feed horn. High power efficiency resulting in low current (< 1 amps) 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.



# 1W Ku-Band Block Up Converter

<b>TECHNICAL SPECIFICATIONS</b>		
<b>RF frequency</b>	<b>ABA1KU</b> <b>ABA1KUL</b> <b>ABA1KUX</b>	14.00 to 14.50 GHz 13.75 to 14.25 GHz 13.75 to 14.50 GHz
<b>Local oscillator</b>	<b>ABA1KU</b> <b>ABA1KUL</b> <b>ABA1KUX</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 temperature</b>		1W (+30 dBm min.)
<b>IF connector</b>		N-type or F-type
<b>Power supply</b>		+15 VDC~+24 VDC via IF cable 15 W max
<b>Output interface</b>		WR-75 Grooved
<b>Linear gain</b>		55 dB nominal
<b>Gain variation</b>	<b>over 54 MHz</b> <b>over 500 MHz</b>	0.7 dB p_p 1.6 dB p_p
<b>Over operating temperature</b>		1.2 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>		-63 dBc/Hz max. @ 100 Hz
		-73 dBc/Hz max. @ 1 kHz
		-83 dBc/Hz max. @ 10 kHz
		-93 dBc/Hz max. @ 100 kHz
<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>ABA1KU</b> <b>ABA1KUF</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>		165 (L) x 107 (W) x 49 (H) mm 6.6" (L) x 4.3" (W) x 1.9" (H)
<b>Weight</b>		1.1 kg (2.2 lbs) max