



# 25W X-Band Block Up Converter

## KEY FEATURES

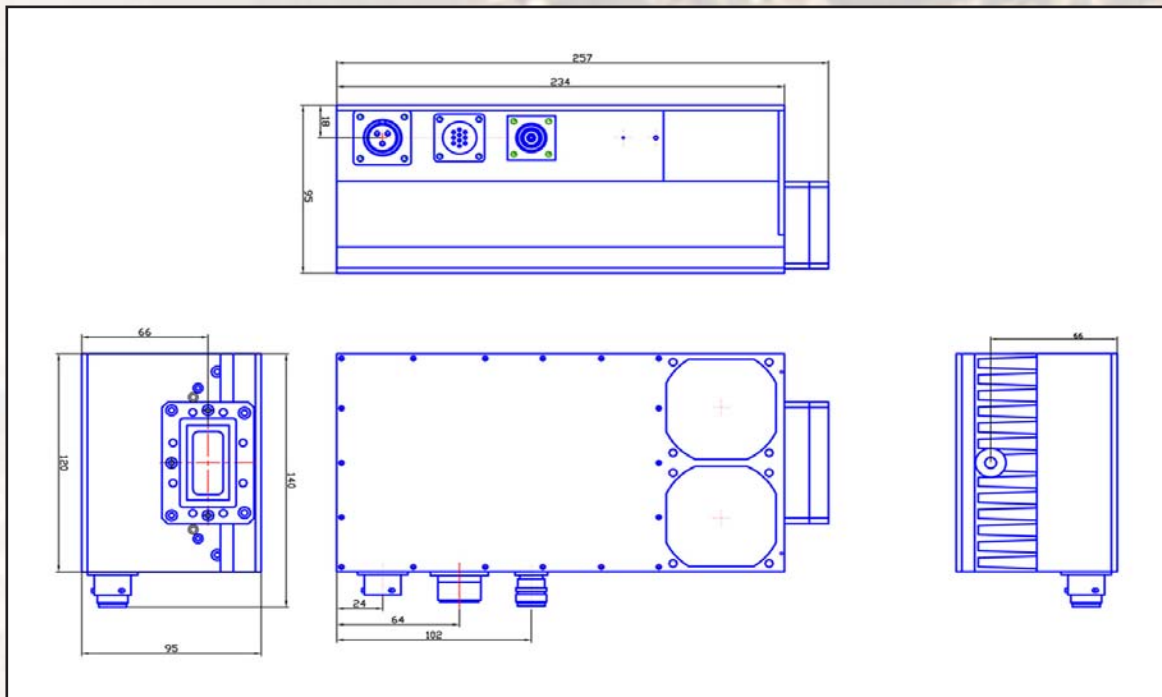
- ◆ 7.900 - 8.400 GHz output frequency
- ◆ Smallest package size and weight
- ◆ High power efficiency ( 25W min @P1dB )
- ◆ L.O. frequency 6.950 GHz
- ◆ Field-exchangeable (F/N) IF connector
- ◆ 80 - 240 VAC or 38 - 56 VDC auto-ranging power (152W max)
- ◆ Power and lock status LED
- ◆ Advanced M & C interface combined RS-232/485
- ◆ FSK (optional)
- ◆ RoHS compliant
- ◆ Three-year warranty

## ABD25X / ABD25XF ABC25X / ABC25XF



This is a unique X-Band (7.900-8.400 GHz) powered with auto-ranging 80-240 VAC or 38-56 VDC unit, designed for mobile applications. It's light enough to be mounted on a feed horn of most antennas.

## Mechanical Drawing





# 25W X-Band Block Up Converter

## TECHNICAL SPECIFICATIONS

<b>RF frequency</b>	7.900 to 8.400 GHz
<b>Local oscillator</b>	6.950 GHz
<b>IF frequency</b>	950 to 1,450 MHz
<b>Output power @ P1dB</b>	25W (+44 dBm min.)
<b>IF connector</b>	N-type or F-type (field-exchangeable)
<b>Power supply via MS connector</b> ABC25X-auto-ranging ABD25X-auto-ranging	38-56 VDC, 152 W max 80-240 VAC, 151 W max
<b>Output interface</b>	WR-112G, CPR-112G, WR-90G, CPR-137G
<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</b>	65 dB min., 72 dB max
<b>IMD3</b>	-27 dBc max
<b>Spurious</b>	-50 dBc max
<b>L.O. leakage</b>	-28 dBm max
<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>RED</b> Summary alarm <b>GREEN</b> All OK <b>YELLOW</b> Standard LO 13.05 GHz
<b>Input interface</b>	ABD25X 50 Ohm (N-type IF in) ABD25XF 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