



# 16 W X-Band Block Up Converter

## KEY FEATURES

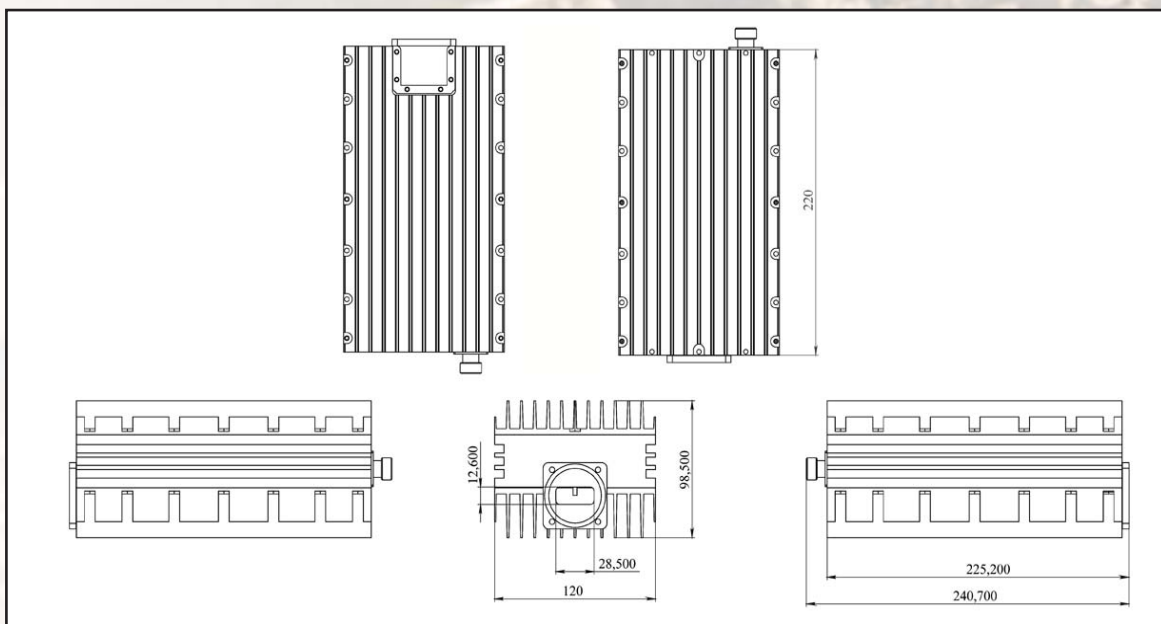
- ◆ Smallest package size and weight
- ◆ Auto-ranging 18-75 VDC power
- ◆ Low power consumption (<83W)
- ◆ Gain temperature compensation
- ◆ L.O. lock and amplifier LEDs
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Optional advanced M&C-combined RS-232/485 interface and optional FSK
- ◆ Three-year warranty
- ◆ RoHS compliant

## ABE16X / ABE16XF



This smallest and the lightest 16W L-To X-Band Block Up Converter is designed to be mounted on the feed horn. The unit is ideal for portable and mobile applications. Unit can be powered either with 24 or 48 VDC and consumes less than 83W.

## Mechanical Drawing





# 16 W X-Band Block Up Converter

<b>TECHNICAL SPECIFICATIONS</b>	
<b>RF frequency</b>	7.90 to 8.40 GHz
<b>Local oscillator</b>	6.95 GHz
<b>IF frequency</b>	950 to 1,450 MHz
<b>Output power @ P1dB min over temp.</b>	16W (+42 dBm)
<b>IF connector</b>	N-type or F-type (field-exchangeable)
<b>Power supply - auto-ranging</b>	+18~+75 VDC via IF cable, 83 W max
<b>Output interface</b>	WR-112G, WR-90G, CPR-112G, CPR-137G
<b>Gain</b>	62 dB min., 65 dB nominal
<b>IMD3</b>	-29 dBc max
<b>L.O. leakage</b>	-33 dBm max
<b>Spurious</b>	-50 dBc max
<b>Gain variation</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>	-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>	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>ABE16X</b> <b>ABE16XF</b> 50 Ohm (N-type IF in) 75 Ohm (F-type IF in)
<b>Status LED</b>	<b>RED</b> <b>GREEN</b> <b>YELLOW</b> Summary alarm All OK Power ON
<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>	240.7 (L) x 120 (W) x 98.5 (H) mm 9.47" (L) x 4.72" (W) x 3.87" (H)
<b>Weight</b>	2.5 kg (5.5 lbs) max