



# 10 W X-Band Block Up Converter

## KEY FEATURES

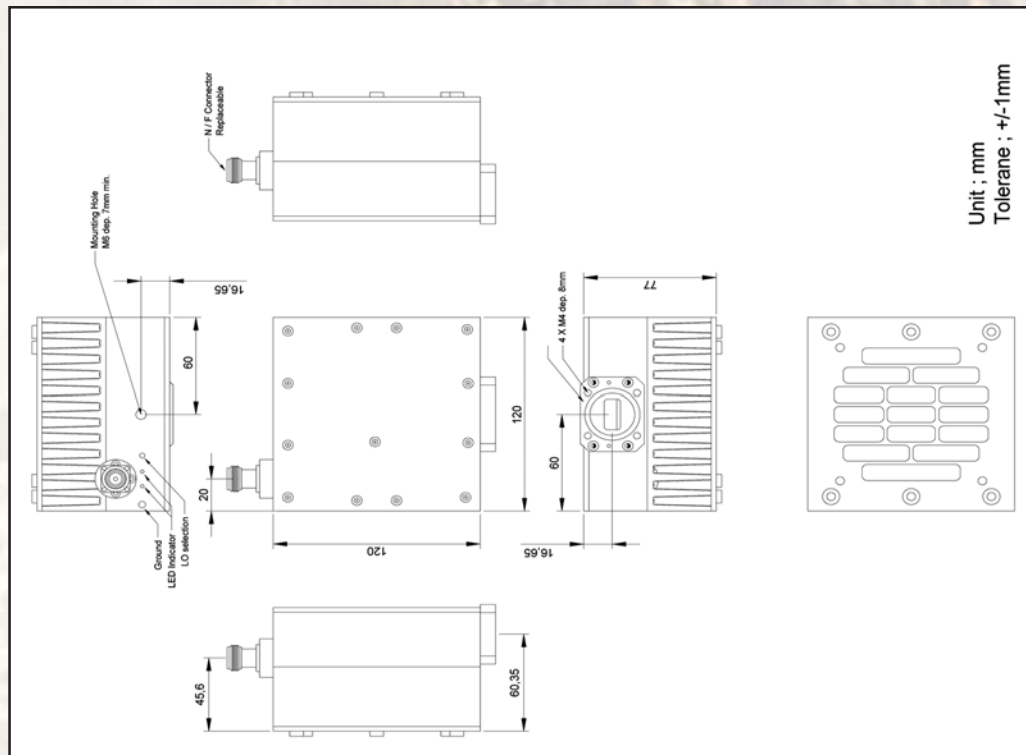
- ◆ Feed horn mounting: lightest (1.5 kg) and smallest (120x120x77mm)
- ◆ Auto-ranging 18-75 VDC power
- ◆ Low power consumption (<70W)
- ◆ Gain temperature compensation
- ◆ L.O., lock and amplifier LEDs
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Optional advanced M&C-combined RS-232/485 interface and optional FSK
- ◆ Three-year warranty
- ◆ RoHS compliant

## ABE10FX / ABE10FXF



This smallest and the lightest 10W L-To X-Band Block Up Converter is designed to be mounted on a feed horn. The unit is ideal for portable and mobile applications. It can be powered either with 24 or 48 VDC and consumes less than 70W.

## Mechanical Drawing





# 10 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>	10W (+40 dBm)
<b>IF connector</b>	N-type or F-type (field-exchangeable)
<b>Power supply - auto-ranging</b>	+18~+75 VDC via IF cable, 70 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> over 40 MHz over 500 MHz	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>ABE10FX</b> <b>ABE10FXF</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>	120 (L) x 120 (W) x 77 (H) mm 4.72" (L) x 4.72" (W) x 3.28" (H)
<b>Weight</b>	1.5 kg (3.3 lbs) max