



10 W X-Band Block Up Converter

KEY FEATURES

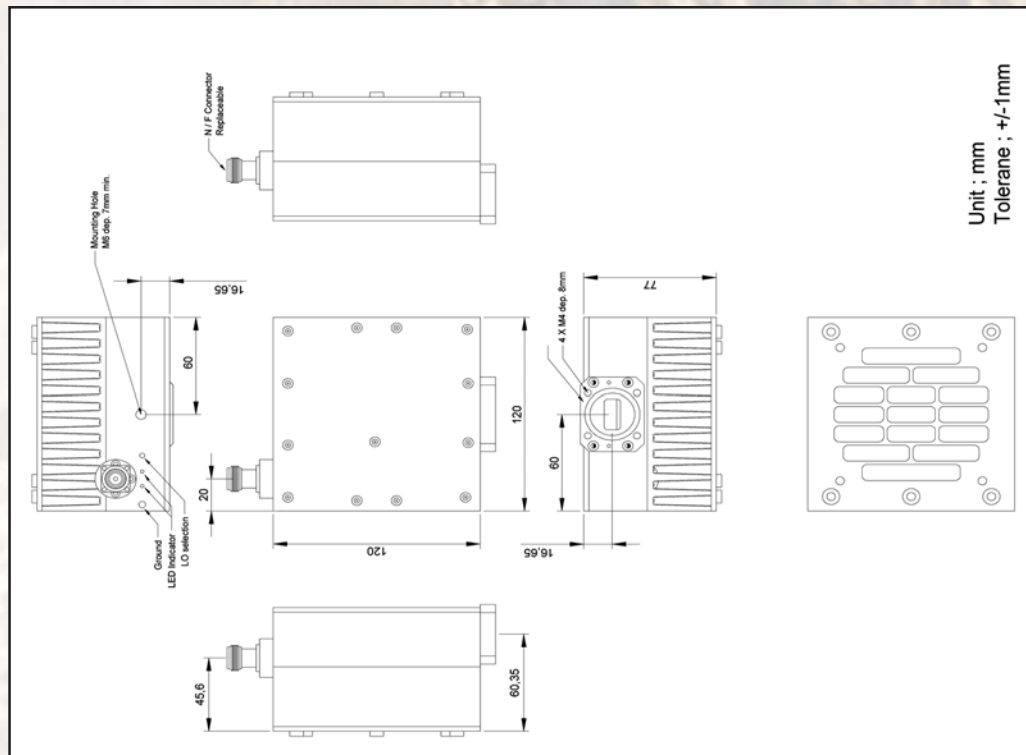
- ◆ Feed horn mounting: lightest (1.5 kg) and smallest (120x120x77mm)
- ◆ Auto-ranging 18-75 VDC power
- ◆ Low power consumption (<70W)
- ◆ Gain temperature compensation
- ◆ L.O., lock and amplifier LEDs
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Internal 10MHz high stability 10^{-8} reference(optional)
- ◆ 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

TECHNICAL SPECIFICATIONS

RF frequency	7.90 to 8.40 GHz
Local oscillator - electronically and manually switchable	6.95 GHz
IF frequency	950 to 1,450 MHz
Output power @ P1dB min over temp.	10W (+40 dBm)
IF connector	N-type or F-type (field-exchangeable)
Power supply - auto-ranging	+18~+75 VDC via IF cable, 70 W max
Output interface	WR-112G, WR-90G, CPR-112G, CPR-137G
Internal 10MHz high stability reference	10 ⁻⁸
Gain	62 dB min., 65 dB nominal
IMD3 (3dB back off P1dB)	-28 dBc max
L.O. leakage	-33 dBm max
Spurious	-50 dBc max
Gain variation over 40 MHz over 500 MHz	0.7 dB p_p 2.0 dB p_p
Over operating temperature	2.2 dB p_p @ fixed frequency
Requirement for external reference frequency input power	via IF cable 10 MHz (sine-wave) -5 to +5 dBm @ input port
Phase noise	-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 -113 dBc/Hz max @ 1 MHz
M&C	RS-232 and RS-485
FSK	Multiplexed on TX IFL, compatible with Comtech and Paradise
Noise figure	20 dB max
Input V.S.W.R.	2 : 1 max
Output V.S.W.R.	2 : 1 max.
Mute	Shut off the BUC in case of L.O. unlocked
Status LED RED GREEN YELLOW	Summary alarm All OK Power ON
Temperature range (ambient) operating storage	-40 deg C to +55 deg C -40 deg C to +75 deg C
Dimensions & housing	120 (L) x 120 (W) x 77 (H) mm 4.72" (L) x 4.72" (W) x 3.28" (H)
Weight	1.5 kg (3.3 lbs) max