



6W Ext. Ku-Band Block Up Converter

KEY FEATURES

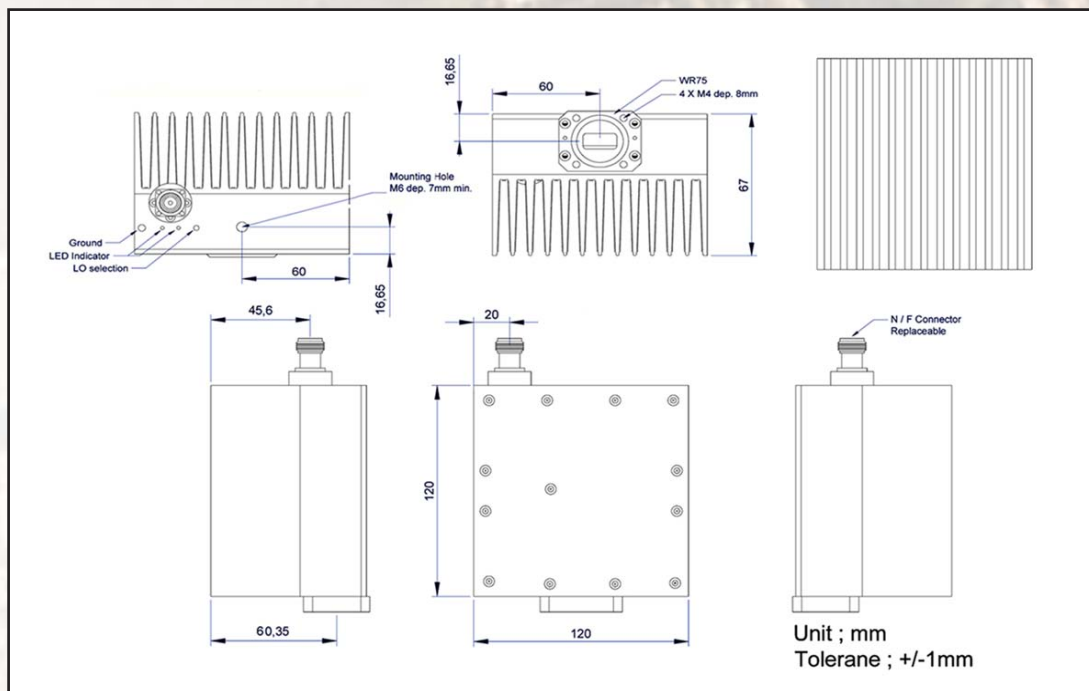
- ◆ Output frequency 13.75-14.50 GHz
- ◆ Double - L.O. (electronically and manually switchable 12.80 and 13.05 GHz)
- ◆ Auto-ranging power 9-36 VDC
- ◆ Incomparable low power consumption (39W max)
- ◆ Digital temperature compensation
- ◆ L.O. lock and amplifier LEDs
- ◆ Field-exchangeable (F/N) IF connector
- ◆ M&C - combined RS-232/485, FSK (optional)
- ◆ Internal 10MHz high stability 10^{-8} reference (optional)
- ◆ Three-year warranty
- ◆ RoHS compliant

ABA6KX / ABA6KXF



This unique smallest and lightest 6W L-To Ku-Band Block Up Converter is based on GaN technology. Incomparable low power consumption, double L.O. and Field-Exchangeable connector features make unit universal for any Ku-Band application. M&C (FSK) capability enables trouble shooting, monitoring and controlling the BUC. User can choose internal 10MHz high stability reference if the corresponding modulator does not provide it

Mechanical Drawing





6W Ext. Ku-Band Block Up Converter

TECHNICAL SPECIFICATIONS

RF frequency	L.O. 13.05 GHz L.O. 12.80 GHz	14.00 to 14.50 GHz 13.75 to 14.50 GHz
Local oscillator-	electronically and manually switchable	13.05 GHz and 12.80 GHz
IF frequency		950 to 1,700 MHz
Output power @ P1dB min over temp.		6W (+38 dBm min)
IF connector		N-type or F-type (field-exchangeable)
Power supply - auto-ranging		+9~+36 VDC via IF cable, 39 W max
Internal 10MHz high stability reference		10 ⁻⁸
Output interface		WR-75 G
Gain		60 dB nominal
IMD3 (3dB back off P1dB)		-28 dBc max
L.O. leakage		-33 dBm max
Spurious		-55 dBc max
Gain variation	over 40 MHz over 500 MHz	1.1 dB p_p 1.4 dB p_p
Over operating temperature		1.2 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
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
M&C		RS-232 and RS-485
FSK		Multiplexed on TX IFL, compatible with Comtech and Paradise
Status LED	RED GREEN YELLOW YELLOW blinking	Summary alarm All OK Standard L.O. 13.05 GHz Extended L.O. 12.80 GHz
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 67 (H) mm 4.72" (L) x 4.72" (W) x 2.63" (H)
Weight		1.5 kg (3.3 lbs) max