

6W Low Ku-Band Block Up Converter

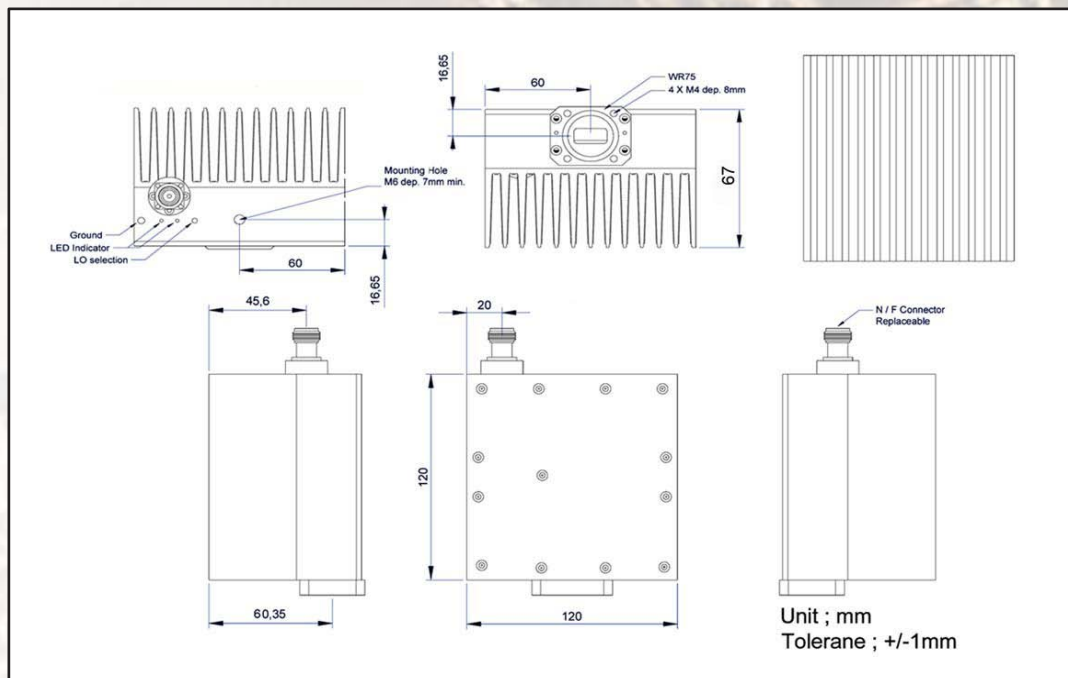
KEY FEATURES

- ◆ Output frequency 12.75-13.50 GHz
- ◆ Based on GaN technology which enables high efficiency, low energy consumption and high reliability
- ◆ Auto-ranging power 15-30 VDC
- ◆ Incomparable low power consumption (35W max)
- ◆ Digital temperature compensation
- ◆ L.O. lock and amplifier LEDs
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Internal 10MHz high stability 10^{-8} reference (optional)
- ◆ Three-year warranty
- ◆ RoHS compliant



This smallest and lightest 6W L to Ku-Band Block Up Converter is based on GaN technology. Incomparable low power consumption, double L.O., Field-Exchangeable connector and auto-ranging (9 to 36 VDC) powering features make the 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 Low Ku-Band Block Up Converter

TECHNICAL SPECIFICATIONS

RF frequency	L.O. 11.80 GHz	12.75 to 13.50 GHz
Local oscillator- switchable		11.80 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		+15~+30 VDC via IF cable, 35 W max
Internal 10MHz high stability reference		10 ⁻⁸
Output interface		WR-75 G
Gain		60 dB nominal
IMD3		-28 dBc max
L.O. leakage		-33 dBm max
Spurious		-55 dBc max
Spectral regrowth (QPSK at 1.5x and OQPSK at 1.0x symbol rate offset with 2dB back-off from rated output power)		-30dBc
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 via IF cable
Requirement for external reference	frequency	10 MHz (sine-wave)
	input power	-5 to +5 dBm @ input port
Phase noise (Exceeds Intelsat's standard IESS308/309)		-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
Noise power density	Transmit	-66 dBm/Hz (max)
	Receive	-157dBm/Hz (max)
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
Vibration and shock		Complies with MIL-STD-810E
Status LED	RED	Summary alarm
	GREEN	All OK
Temperature range (ambient)		
	operating	-40 deg C to +55 deg C
	storage	-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