



8W Mini Fanless Ext. Ku-Band Block Up Converter

KEY FEATURES

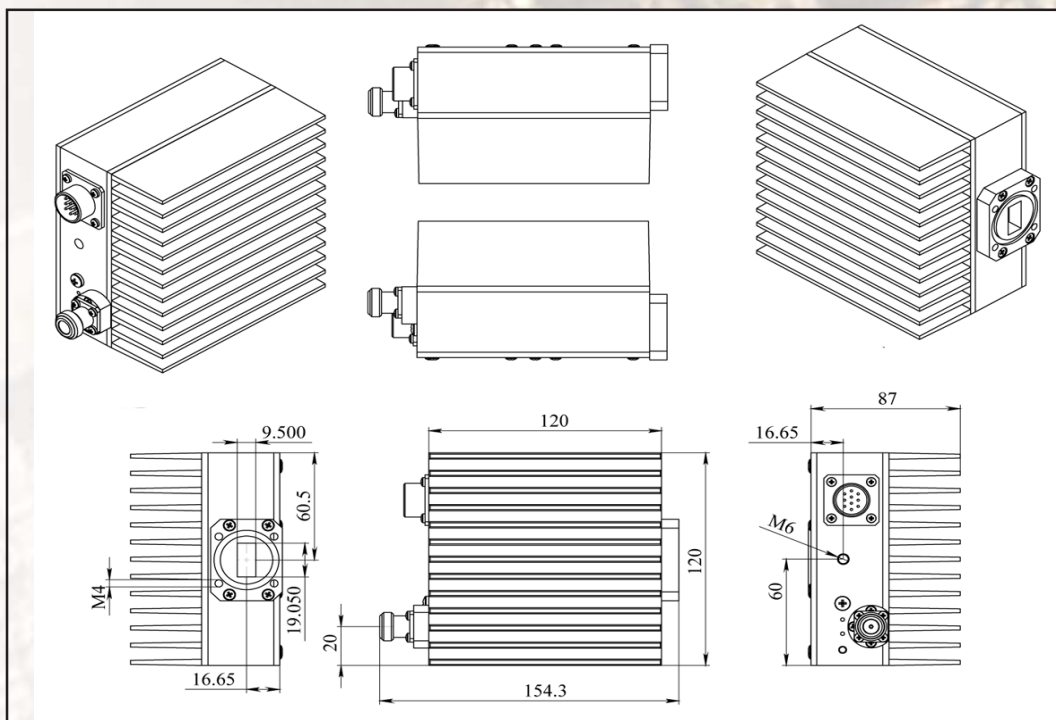
- ◆ Fanless, smallest and lightest
- ◆ Output frequency 13.75-14.50 GHz
- ◆ Double - L.O. (electronically and manually switchable 12.80 / 13.05 GHz)
- ◆ Auto-ranging power 18-75 VDC
- ◆ Incomparable low power consumption (59W max)
- ◆ Digital temperature compensation
- ◆ L.O. lock and amplifier LEDs
- ◆ 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

ABE8KX / ABE8KXF



This smallest and lightest fanless 8W 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 (24 or 48 VDC) powering 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





8W Mini Fanless Ext. Ku-Band Block Up Converter

TECHNICAL SPECIFICATIONS

RF frequency	L.O. 13.05 GHz	14.00 to 14.50 GHz
	L.O. 12.80 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.		8W (+39 dBm min)
IF connector		N-type or F-type (field-exchangeable)
Power supply - auto-ranging		+18~+75 VDC via IF cable, 59 W max
Internal 10MHz high stability reference		10 ⁻⁸
Output interface		WR-75 G
Gain		65 dB min., 68 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	1.1 dB p_p
	over 500 MHz	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 Interface		RS-232 and RS-485
FSK		Multiplexed on TX IFL, compatible with Comtech and Paradigm
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		-40 deg C to +55 deg C
storage		-40 deg C to +75 deg C
Dimensions & housing		120 (L) x 120 (W) x 87 (H) mm 4.72" (L) x 4.72" (W) x 3.46" (H)
Weight		1.8 kg (3.0 lbs) max