



3W Ext. Mini Low Ku-Band Block Up Converter

KEY FEATURES

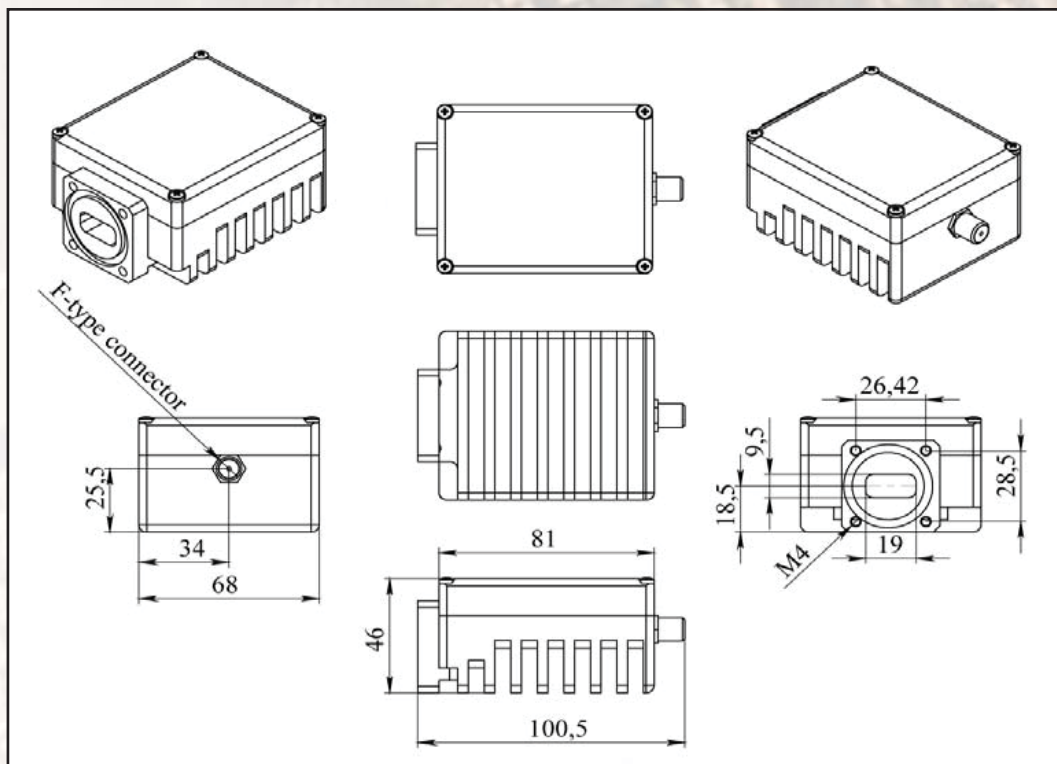
- ◆ Output frequency 12.75-13.50 GHz
- ◆ L.O. 11.80 GHz
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability
- ◆ Industry's lowest power consumption (16W max.)
- ◆ Smallest package size and weight
- ◆ Powered through IF cable
- ◆ High power efficiency (3W min.)
- ◆ RoHS compliant

ABA3KXL / ABA3KXLF



This smallest and lightest 3W L-To Low Ku-Band Block Up Converter is based on GaN technology and is designed to be mounted directly on the feed horn. High power efficiency resulting in low current (<1 amps) consumption allows user to pass DC supply voltage via IF cable. The unit is ideal for network and point to point, data distribution, portable and emergency applications.

Mechanical Drawing





3W Ext. Mini Low Ku-Band Block Up Converter

TECHNICAL SPECIFICATIONS		
RF frequency		12.75 to 13.50 GHz
Local oscillator		11.80 GHz
IF frequency		950 to 1,700 MHz
Output power		3W (+35 dBm min.)
IF connector		N-type or F-type
Power supply		+15 VDC~+24 VDC via IF cable 16 W max.
Output interface		WR-75 G
Gain		60 dB nominal
IMD3 (two tones)		-26 dBc max. 2 signal 5MHz apart at P-LINEAR
L.O. leakage		-45 dBm max.
Spurious		-50 dBc max.
Spectral regrowth (QPSK at 1.5x and OQPSK at 1.0x symbol rate offset with 2dB back-off from rated output power)		-30 dBc
Requirement for external reference: frequency input power		via IF cable 10 MHz (sine-wave) -5 to +5 dBm @ input port
TX Gain variation		± 0.5 dB over 40 MHz ± 1.8 dB over full band
TX Gain stability over temperature range		± 1.5 dB typ., ± 1.8 dB max.
Phase noise (Exceeds Intelsat's standard IESS308/309)		-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 power density	Transmit Receive	-60 dBm/Hz (max.) -155 dBm/Hz (max.)
Noise figure		20 dB max.
Input V.S.W.R.		1.5 : 1 max.
Output V.S.W.R.		1.5 : 1 max.
Mute		Shut off the BUC in case of L.O. unlocked
Input interface	ABA3KXL ABA3KXLF	50 Ohm (N-type IF in) 75 Ohm (F-type IF in)
Temperature range (ambient) operating storage		-40 deg C to +55 deg C -55 deg C to +85 deg C
Vibration and shock		Complies with MIL-STD-810E
IP rating		IP67
Dimensions & housing		100.5 (L) x 68 (W) x 46 (H) mm 3.96" (L) x 2.68" (W) x 1.81" (H)
Weight		0.45 kg (0.99 lbs) max.