

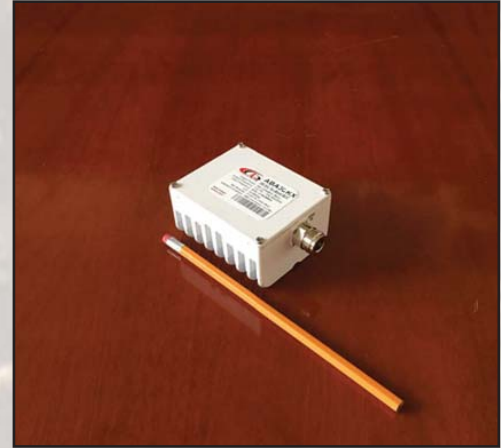


2W Ext. Mini Ku-Band Block Up Converter

KEY FEATURES

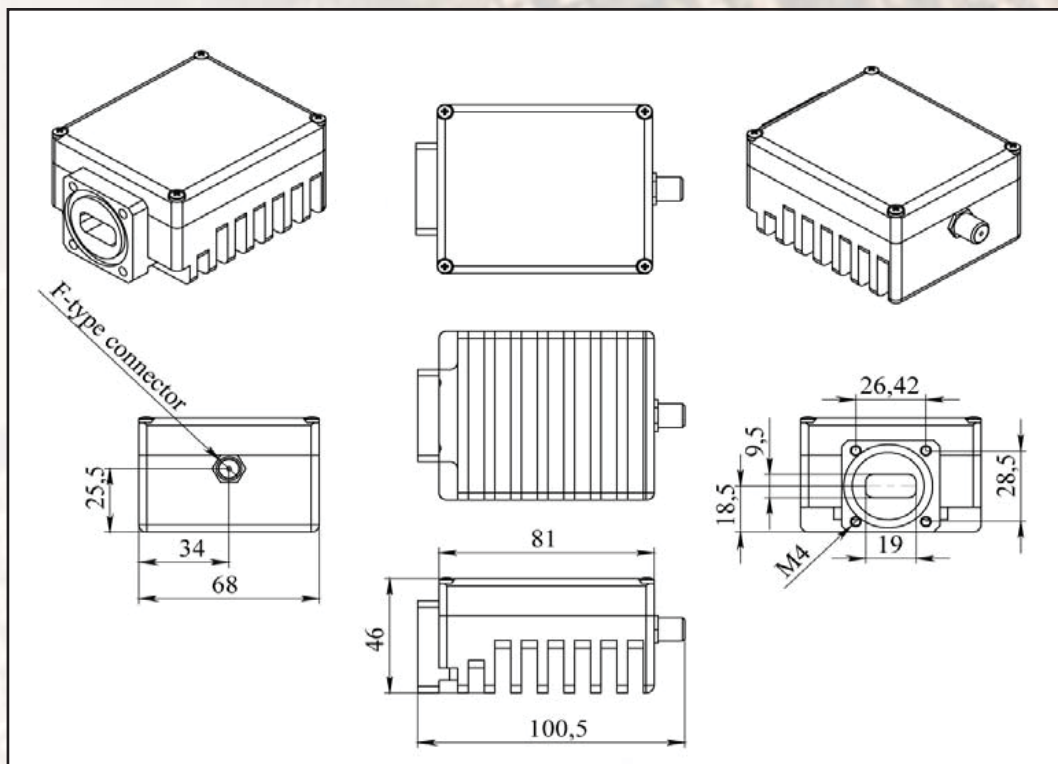
- ◆ Output frequency 13.75-14.50 GHz
- ◆ L.O. 12.80 GHz
- ◆ Based on GaAs technology which enables high efficiency, low power consumption and high reliability
- ◆ Industry's lowest power consumption (14W max.)
- ◆ Smallest package size and weight
- ◆ Powered through IF cable
- ◆ High power efficiency (2W min.)
- ◆ RoHS compliant

ABA2KX / ABA2KXF



This smallest and lightest 2W L-To Ku-Band Block Up Converter is based on GaAs 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





2W Ext. Mini Ku-Band Block Up Converter

TECHNICAL SPECIFICATIONS	
RF frequency	13.75 to 14.50 GHz
Local oscillator	12.80 GHz
IF frequency	950 to 1,700 MHz
Output power	2W (+33 dBm min.), P-Linear 1.2W (+30.8 dBm min.)
IF connector	N-type or F-type
Power supply	+15 VDC~+24 VDC via IF cable 14 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
TX Gain stability over temperature range	± 1.8 dB over full band ± 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
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	ABA2KX ABA2KXF
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.