



6W Super Mini Ext. Low Ku-Band BUC

KEY FEATURES

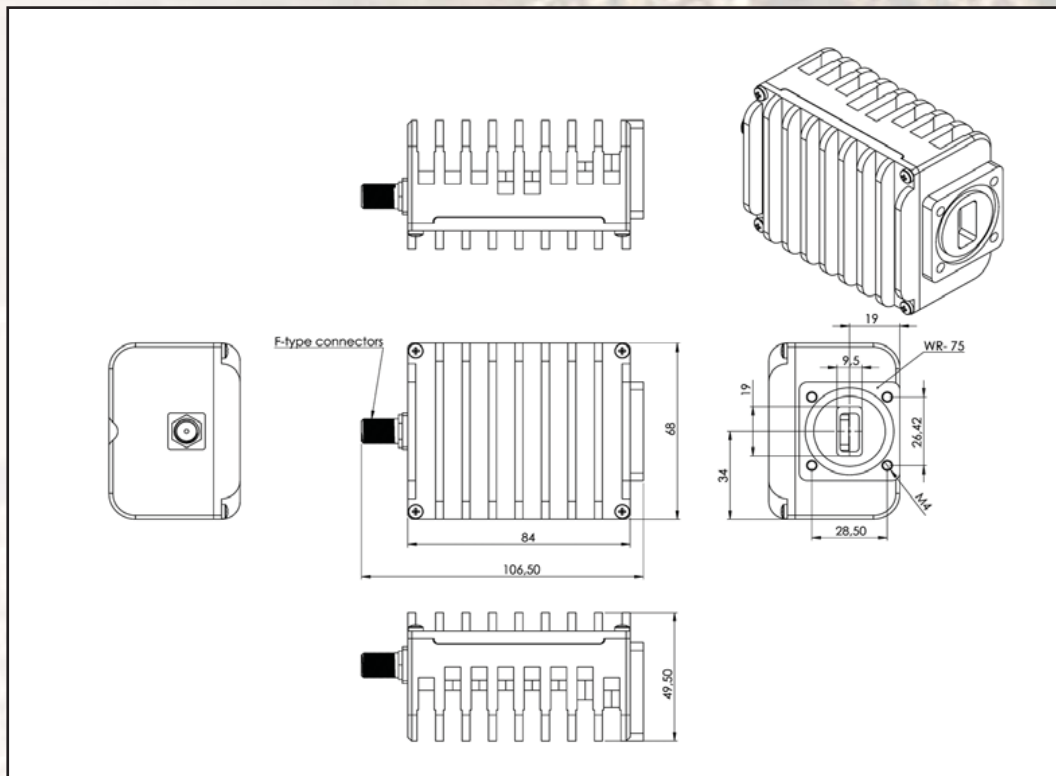
- ◆ Output frequency 12.75-13.50 GHz
- ◆ L.O. 11.80 GHz
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability
- ◆ Industry's lowest power consumption (32W max.)
- ◆ Smallest package size and weight
- ◆ Powered through IF cable
- ◆ High power efficiency
- ◆ RoHS compliant

ABA6SKXL / ABA6SKXLF



This smallest and lightest 6W 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 @24VDC) consumption allows to use this BUC with any modem without an external power supply.

Mechanical Drawing





6W Super Mini Ext. Low Ku-Band BUC

TECHNICAL SPECIFICATIONS		
RF frequency		12.75 to 13.50 GHz
Local oscillator		11.80 GHz
IF frequency		950 to 1,700 MHz
Output power		6W (+37.8 dBm min.), P-Linear 3W (+34.8 dBm min.)
IF connector		N-type or F-type
Power supply		+15 VDC~+24 VDC via IF cable 32 W max.
Output interface		WR-75 G
Gain		62 dB nominal
IMD3 (two tones)		-26 dBc max. 2 signal 5MHz apart at P-LINEAR
L.O. leakage		-45 dBm max. @RF off
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)		-50 dBc/Hz max. @ 10 Hz
		-60 dBc/Hz max. @ 100 Hz
		-70 dBc/Hz max. @ 1 KHz
		-80 dBc/Hz max. @ 10 KHz
		-90 dBc/Hz max. @ 100 KHz
		-100 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	ABA6SKXL ABA6SKXLF	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		84 (L) x 68 (W) x 49.5 (H) mm 3.30" (L) x 2.67" (W) x 1.94" (H)
Weight		0.340 kg (0.75 lbs) max.