16W Fan-less Ext. Low Ku-Band BUC

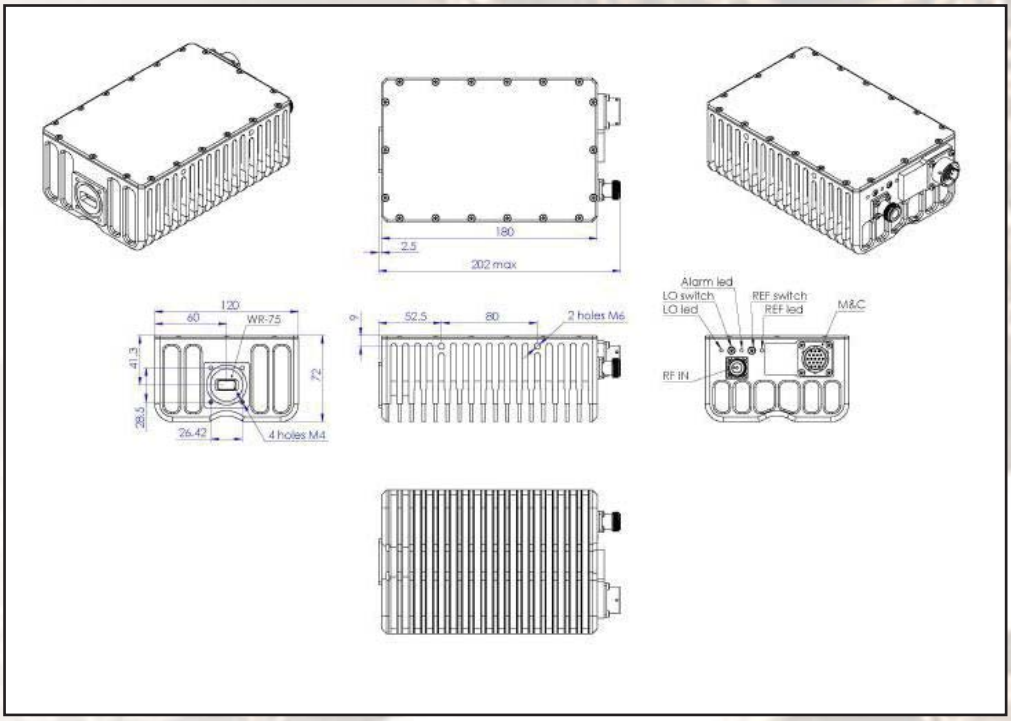
KEY FEATURES

- Output frequency 12.75-13.50 GHz
- Built-in redundancy option
- Based on GaN technology which enables high efficiency, low power consumption and high reliability
- Incomparable low power consumption (92W max.)
- Auto-ranging powering option 15 - 60 VDC
- Smallest, lightest and fan-less
- Internal 10MHz high stability reference (optional)
- Digital temperature compensation
- Field-exchangeable (F/N) IF connector
- M&C - combined RS-232/485 and optional FSK
- Amplifier, L.O. and 10MHz Reference Status LEDs
- RoHS compliant

ABEN16KXL/ ABEN16KXLF

This smallest and lightest fanless 16W L-To Low Ku-Band Block Up Converter is designed to be mounted on a feed horn. The unit is ideal for portable and mobile applications. Double L.O. feature makes unit universal for Low Ku-Band requirements. It is powered either with 24/48 VDC and consumes less than 92W.

Mechanical Drawing



16W Fan-less Ext. Low Ku-Band BUC

TECHNICAL SPECIFICATIONS		
RF frequency		12.75 to 13.50 GHz
Dual local oscillator		11.80 GHz and 12.05 GHz
IF frequency		950 to 1,700 MHz
Output power		16W (+42 dBm min.) 8.2W P-Linear (39 dBm min.)
IF connector		N-type or F-type (field-exchangeable)
Power supply auto-ranging		+15 ~ +60 VDC via IF cable, 92W max.
Output interface		WR-75 G
Gain		68 dB typ.
IMD3 (two tones)		-26 dBc max. 2 signal 5 MHz apart at P-LINEAR
L.O. leakage		-45 dBm max.
Spurious		-53 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)		-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
		-115 dBc/Hz max. @ 1 MHz
Noise power density	**Transmit** **Receive**	-66 dBm/Hz (max.) -157 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.
M&C		RS-232 and RS-485, Ethernet, FSK (optional)
Mute		Shut off the HPA if L.O. unlocked
Status LED		
Amplifier	**RED**	Summary alarm
	GREEN	All OK
L.O.	**GREEN**	All OK standard L.O. 12.05 GHz
	GREEN blinking	All OK extended L.O. 11.80 GHz
10MHz	**GREEN**	External 10MHz reference
	GREEN blinking	Internal 10MHz reference
	RED	No 10MHz reference detected
Temperature range (ambient)		
operating		-40 deg C to +55 deg C
storage		-55 deg C to +85 deg C
Vibration and shock		Complies with MIL-STD-810E
IP rating		IP67
Dimensions & housing		180 (L) x 120 (W) x 72 (H) mm 7.08" (L) x 4.72" (W) x 2.83" (H)
Weight		2.8 kg (6.17 lbs) max.