



25W Fan-less Ext. Low Ku-Band BUC

KEY FEATURES

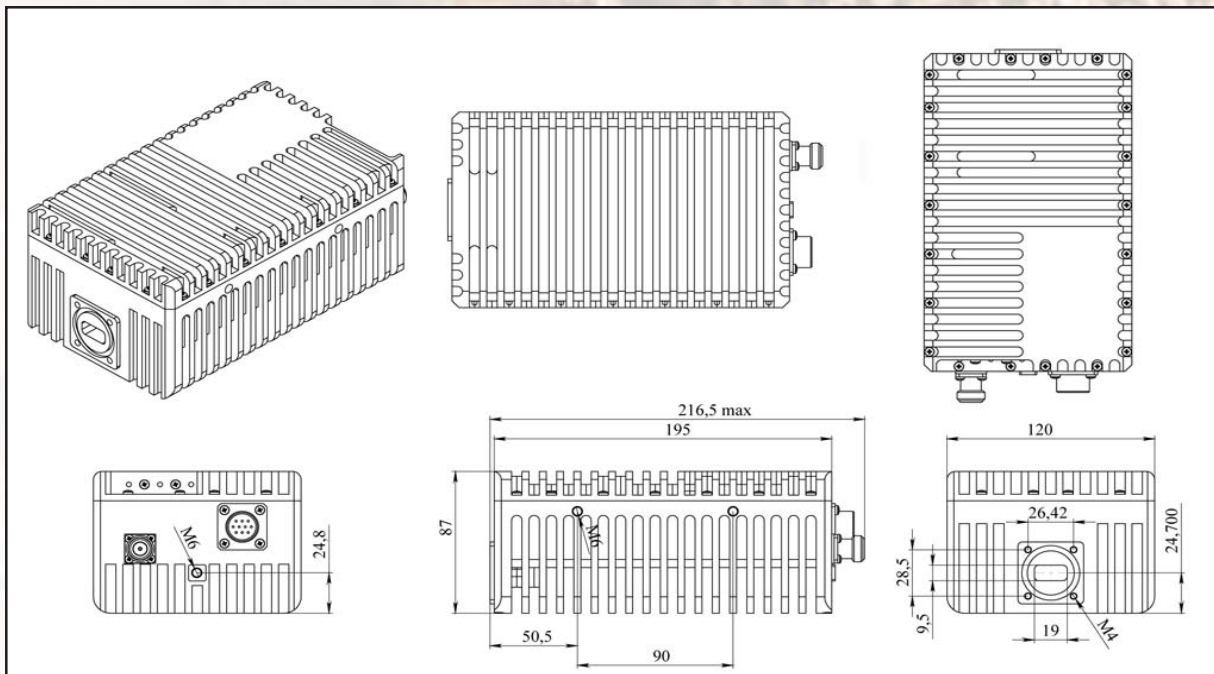
- ◆ Output frequency 12.75-13.50 GHz
- ◆ Based on GaN technology which enables high efficiency, low energy consumption and high reliability
- ◆ Smallest , lightest and fan-less
- ◆ Auto-ranging power 15-60 VDC
- ◆ Incomparable low power consumption (114W max)
- ◆ Digital temperature compensation
- ◆ L.O. lock and amplifier LEDs
- ◆ Field-exchangeable (F/N) IF connector
- ◆ M&C - combined RS-232/485/FSK (optional), Ethernet (optional)
- ◆ Internal 10MHz high stability 10^8 reference (optional)
- ◆ Three-year warranty
- ◆ RoHS compliant

ABEN25KXL / ABEN25KXLF



This smallest and lightest fan-less 25W Low-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 114W.

Mechanical Drawing





25W Fan-less Ext. Ku-Band Block Up Converter

TECHNICAL SPECIFICATIONS

RF frequency	12.75 to 13.50 GHz	
Local oscillator	11.80 GHz and 12.05 GHz	
IF frequency	950 to 1,700 MHz	
Output power	25W (43.5 dBm min., 44dBm typ.) 13W P-linear (41 dBm min.)	
IF connector	N-type or F-type (field-exchangeable)	
Power supply - auto-ranging	+15~+60 VDC via IF cable, 114W max.	
Internal 10MHz high stability reference	10 ⁻⁸	
Output interface	WR-75 G	
Gain	68 dB typ.	
IMD3 (two tones)	-26 dBc max. 2 signal 5MHz 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	
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	
Requirement for external reference frequency input power	via IF cable 10 MHz (sine-wave) -5 to +5 dBm @ input port	
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	-66 dBm/Hz (max)
	Receive	-157dBm/Hz (max)
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	RS-232 and RS-485, Ethernet	
FSK	Multiplexed on TX IFL, compatible with Comtech and Paradigm	
Status LED	RED GREEN YELLOW YELLOW blinking	Summary alarm All OK All OK standard L.O 12.05 GHz All OK extended L.O. 11.80 GHz
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	
Dimensions & housing	216.5 (L) x 120 (W) x 87 (H) mm 7.67" (L) x 4.72" (W) x 3.93" (H)	
Weight	2.8 kg (6.17 lbs) max	