



## 6W Mini Ext. Ku-Band Block Up Converter

### KEY FEATURES

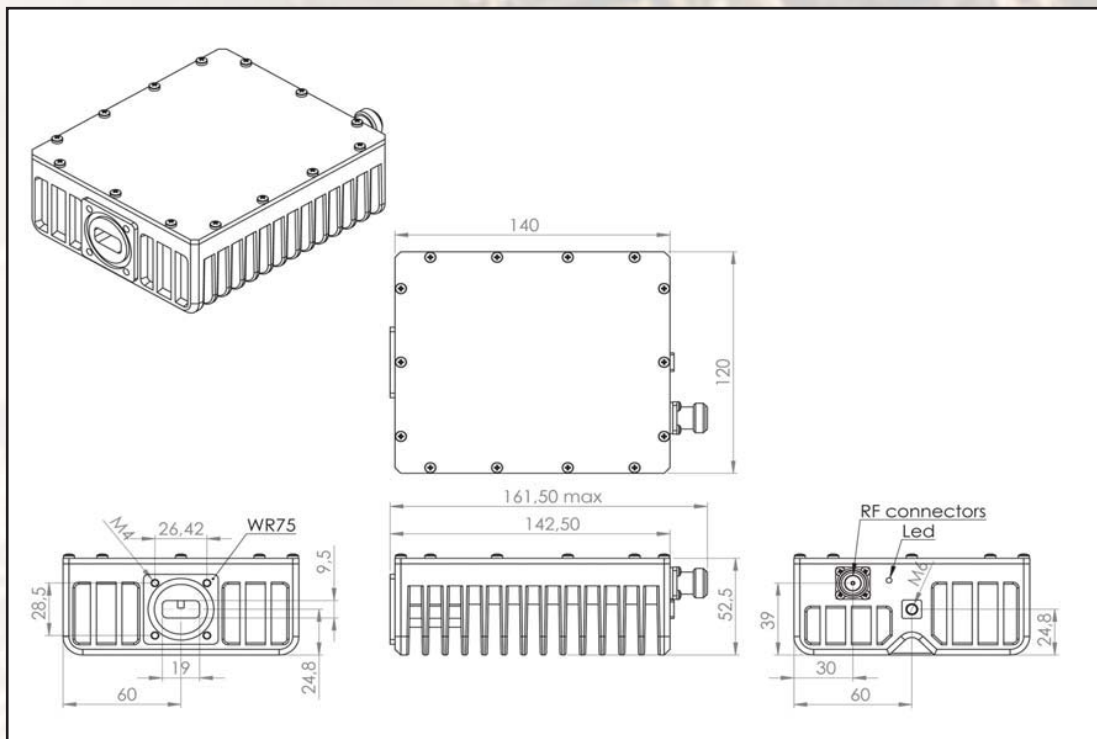
- ◆ Output frequency 13.75-14.50 GHz
- ◆ L.O. 12.80 GHz
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability
- ◆ Incomparable low power consumption (35W max.) - can be powered by some iDirect or similar modems
- ◆ Extreme P-Out GaN linearity
- ◆ Auto-ranging powering option 15 - 30 VDC
- ◆ Digital temperature compensation
- ◆ L.O. lock and amplifier LEDs
- ◆ Internal 10MHz high stability reference (optional)
- ◆ RoHS compliant

### ABA6KXHH



This smallest and lightest 6W L-To Ku-Band Block Up Converter is based on GaN technology. Incomparable low power consumption allows the BUC to be powered by iDirect and similar modems. Internal 10MHz reference option enables using the BUC with the modems without 10MHz reference.

### Mechanical Drawing





## 6W Mini Ext. 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	6W (+38 dBm min)
IF connector	F-type
Power supply auto-ranging	+15 ~ +30 VDC via IF cable, 35W max.
Output interface	WR-75 G
Gain	60 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
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.) -150 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
Status LED Amplifier	RED
	GREEN
L.O.	GREEN
10MHz	GREEN GREEN blinking RED
Summary alarm	
All OK	
All OK L.O. is set to 12.80 GHz	
External 10MHz reference	
Internal 10MHz reference	
No 10MHz reference detected	
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
Humidity	Up to 100%, Complies with IP65 Rating
IP rating	IP67
Dimensions & housing	140 (L) x 120 (W) x 52.5 (H) mm 5.51" (L) x 4.72" (W) x 2.06" (H)
Weight	1.3 kg (2.9 lbs.) max.