



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

### KEY FEATURES

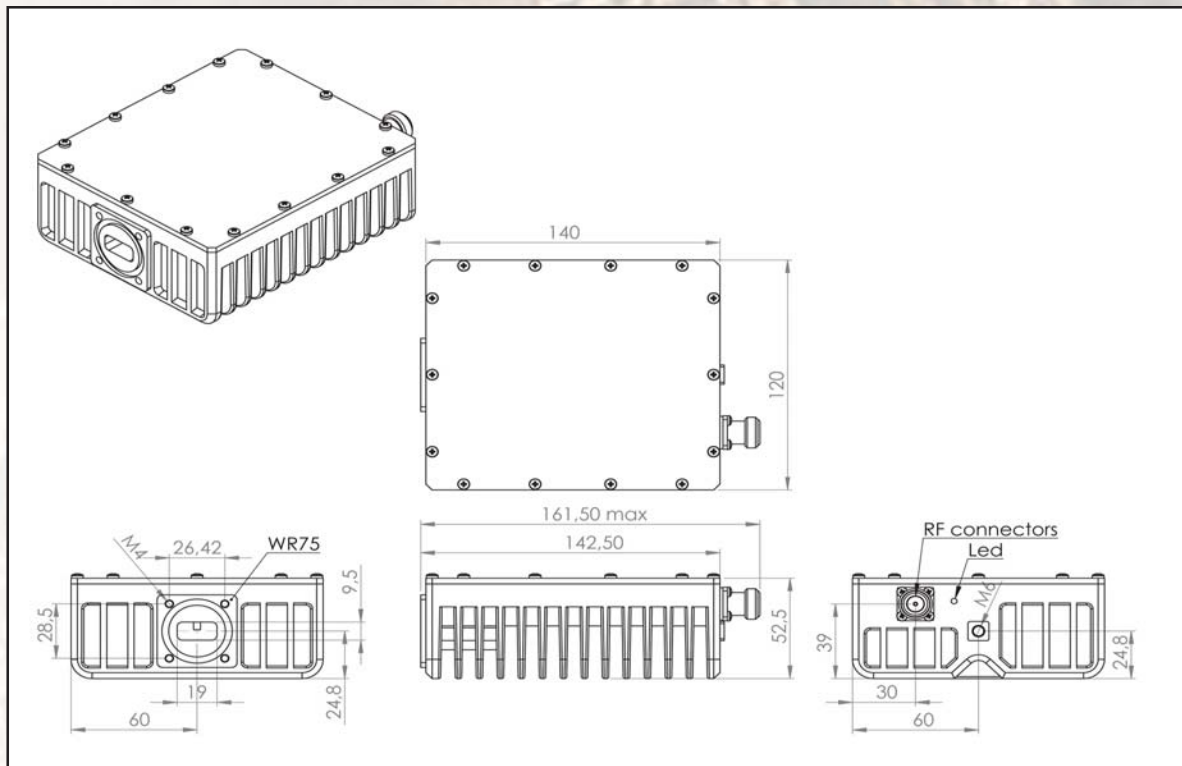
- ◆ Output frequency 13.75-14.50 GHz
- ◆ Based on GaN technology which enables high efficiency low energy consumption and high reliability
- ◆ Incomparable low power consumption (35W max)- can be powered by iDirect or similar modems
- ◆ Auto-ranging 15-30 VDC power
- ◆ Extreme P-Out GaN linearity
- ◆ Digital temperature compensation
- ◆ L.O. lock and amplifier LEDs
- ◆ RoHS compliant
- ◆ Three year warranty

### ABA6KXHH



This smallest and lightest 6W L-To Ext. (13.75-14.50GHz) 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.

### Mechanical Drawing





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

### TECHNICAL SPECIFICATIONS

|  |   |
|--|---|
| RF frequency   | 13.75 – 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, 35 W 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<br>(QPSK at 1.5x and OQPSK at 1.0x symbol rate offset with 2dB back-off from rated output power) | -30dBc  |
| TX Gain variation  | ± 0.5 dB over 40 MHz<br>± 1.8 dB over full band   |
| TX Gain stability over temperature range   | ± 1.5 dB typ., ± 1.8 dB max   |
| Requirement for external reference<br>frequency<br>input power   | via IF cable<br>50 MHz (sine-wave)<br>-5 to +5 dBm @ input port   |
| Phase noise<br><br>(Exceeds Intelsat's standard IESS308/309)   | -53 dBc/Hz max. @ 10 Hz<br>-63 dBc/Hz max. @ 100 Hz<br>-73 dBc/Hz max. @ 1 KHz<br>-83 dBc/Hz max. @ 10 KHz<br>-93 dBc/Hz max. @ 100 KHz<br>-113 dBc/Hz max. @ 1 MHz |
| Noise power density  | Transmit<br>Receive   |
| Noise figure   | -60 dBm/Hz (max)<br>-150 dBm/Hz (max)   |
| Input V.S.W.R.   | 20 dB max   |
| Output V.S.W.R.  | 2 : 1 max   |
| Mute   | 2 : 1 max.  |
| Status LED   | Shut off the BUC in case of L.O. unlocked   |
| RED<br>GREEN<br>YELLOW blinking  | Summary alarm<br>All OK<br>All OK extended L.O. 12.80 GHz   |
| Environmental<br>operating temperature<br>Storage temperature<br>Humidity  | -40 deg C to +55 deg C<br>-55 deg C to +85 deg C<br>-Up to 100%, Complies with IP65 Rating  |
| Vibration and shock  | Complies with MIL-STD-810E  |
| Dimensions & housing   | 140 (L) x 120 (W) x 52 (H) mm<br>5.6" (L) x 4.8" (W) x 2.08" (H)  |
| Weight   | 1.3 kg (2.9 lbs) max  |