



## 20 W Ext. Low Ku-Band Block Up Converter

### KEY FEATURES

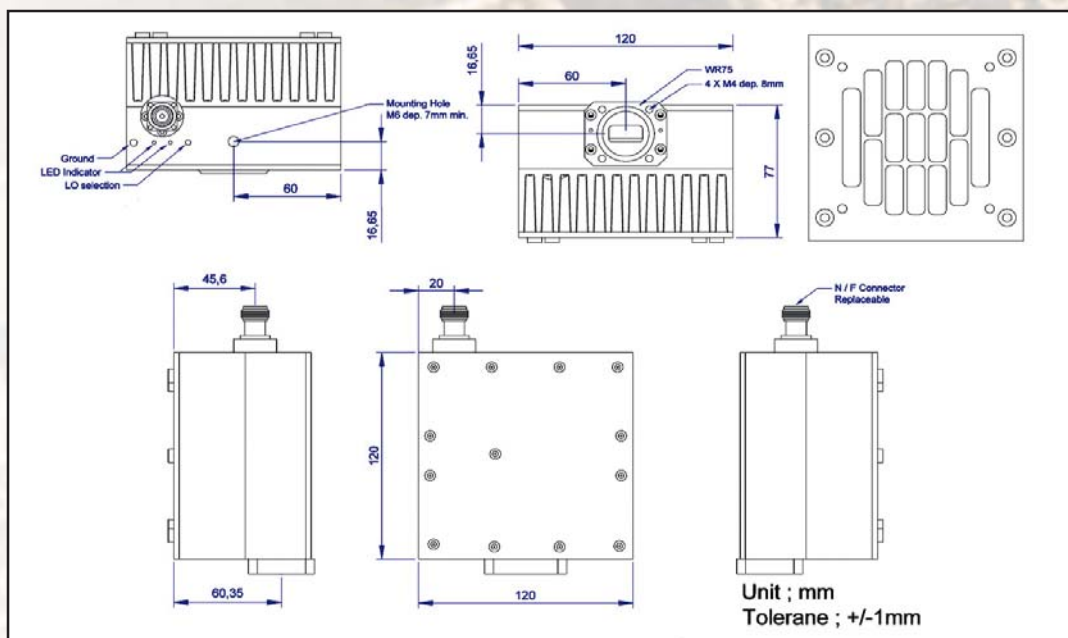
- ◆ Output frequency 12.75-13.50 GHz
- ◆ Smallest and lightest
- ◆ Double - L.O. (electronically and manually switchable (11.80 / 12.05 GHz))
- ◆ Auto-ranging 15-60 VDC
- ◆ Low power consumption (98W max)
- ◆ Digital temperature compensation
- ◆ L.O. lock and amplifier LEDs
- ◆ Field-exchangeable (F/N) IF connector
- ◆ M&C - combined RS-232/485/FSK (optional)
- ◆ Internal 10MHz high stability  $10^{-8}$  reference (optional)
- ◆ Ethernet control (optional)
- ◆ Three-year warranty
- ◆ RoHS compliant

### ABE20KXL / ABE20KXLF



This smallest and lightest 20W L-To 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 Ku-Band requirements. It is powered either with 24 or 48 VDC and consumes less than 98W.

### Mechanical Drawing





## 20 W Ext. Low Ku-Band Block Up Converter

<b>TECHNICAL SPECIFICATIONS</b>	
<b>RF frequency</b>	13.00 to 13.50 GHz 12.75 to 13.50 GHz
<b>Local oscillator- electronically and manually switchable</b>	12.05 GHz and 11.80 GHz
<b>IF frequency</b>	950 to 1,700 MHz
<b>Output power</b>	20W (+43 dBm min) 10W (+40 dBm) P-Linear
<b>IF connector</b>	N-type or F-type (field-exchangeable)
<b>Power supply- auto-ranging</b>	+15~+60 VDC via IF cable, 98 W max
<b>Internal 10MHz high stability reference</b>	10 <sup>-8</sup>
<b>Output interface</b>	WR-75 G
<b>Gain variation</b> over 40 MHz over 500 MHz Over operating temperature	± 0.5 dB over 40MHz ± 1.8 dB over full band ± 1.8 dB max.
<b>Gain</b>	64 dB min., 68 dB nominal
<b>IMD3</b> (3dB back off Rated Power)	-26 dBc max
<b>L.O. leakage</b>	-45 dBm max
<b>Spurious</b>	-50 dBc max
<b>Requirement for external reference</b> frequency input power	via IF cable 10MHz (sine-wave) -5 to +5 dBm @ input port
<b>Phase noise</b>  (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
<b>M&amp;C</b>	RS-232 and RS-485, Ethernet
<b>FSK</b>	Multiplexed on TX IFL, compatible with Comtech and Paradigm
<b>Noise figure</b>	20 dB max
<b>Input V.S.W.R.</b>	2 : 1 max
<b>Output V.S.W.R.</b>	2 : 1 max.
<b>Mute</b>	Shut off the BUC in case of L.O. unlocked
<b>Status LED</b>  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
<b>Temperature range (ambient)</b>  operating storage	-40 deg C to +55 deg C -55 deg C to +85 deg C
<b>Dimensions &amp; housing</b>	120 (L) x 120 (W) x 77 (H) mm 4.72" (L) x 4.72" (W) x 3.03" (H)
<b>Weight</b>	1.8 kg (4.0 lbs) max