



# 40 W Ext. Ku-Band Block Up Converter

## KEY FEATURES

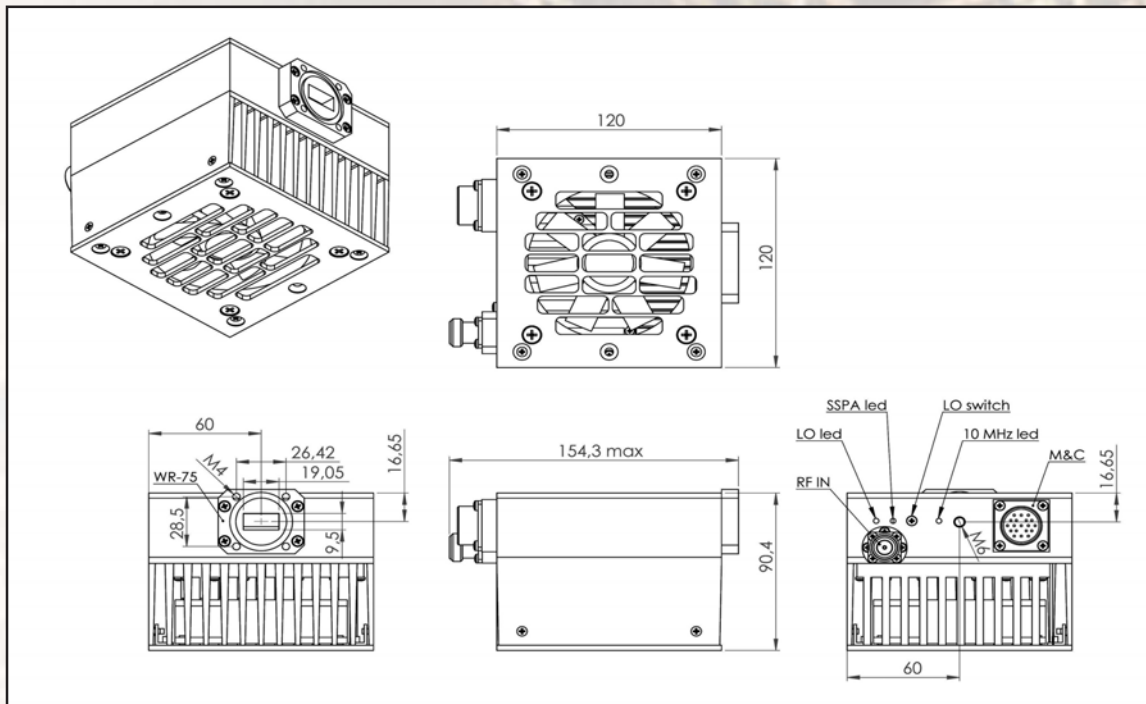
- ◆ Output frequency 13.75-14.50 GHz
- ◆ Smallest and lightest
- ◆ Double - L.O. (electronically and manually switchable (12.80 / 13.05 GHz)
- ◆ Auto-ranging 30-60 VDC
- ◆ Incomparable Low power consumption (192W max)
- ◆ Digital temperature compensation
- ◆ Amplifier, L.O. and 10 MHz Reference Status 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

## ABC40SKX / ABC40SKXF



This smallest and lightest 40W 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. The unit can use either external or internal 10MHz reference.

## Mechanical Drawing





## 40 W Ext. Ku-Band Block Up Converter

<b>TECHNICAL SPECIFICATIONS</b>	
<b>RF frequency</b>	14.00 to 14.50 GHz 13.75 to 14.50 GHz
<b>Local oscillator- electronically and manually switchable</b>	13.05 GHz and 12.80 GHz
<b>IF frequency</b>	950 to 1,700 MHz
<b>Output power</b>	40W (45.5 dBm min, 46 dBm typ.) 20W P-Linear (43 dBm min.)
<b>IF connector</b>	N-type or F-type (field-exchangeable)
<b>Power supply- auto-ranging</b>	+30~+60 VDC via IF cable, 192 W max
<b>Internal 10MHz high stability reference</b>	10 <sup>-8</sup>
<b>Output interface</b>	WR-75 G
<b>Gain variation</b> <b>over 40 MHz</b> <b>over 500 MHz</b>	± 0.8 dB p-p ± 1.5 dB p-p
<b>Over operating temperature</b>	± 1.5 dB p-p @ fixed frequency
<b>Gain</b>	67 dB min., 70 dB nominal
<b>IMD3</b> (3dB back off rated output power)	-26 dBc max 2 signal 5MHz apart at P-LINEAR
<b>L.O. leakage</b>	-45 dBm max
<b>Spurious</b>	-53 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)	-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
<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> <b>Amplifier</b> <b>RED</b> <b>GREEN</b> <b>L.O.</b> <b>YELLOW</b> <b>YELLOW blinking</b> <b>10 MHz</b> <b>GREEN</b> <b>GREEN blinking</b> <b>RED</b>	Summary alarm All OK All OK standard L.O. 13.05 GHz All OK extended L.O. 12.80 GHz External 10MHz reference Internal 10MHz reference No 10MHz reference detected
<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 90.4 (H) mm 4.72" (L) x 4.72" (W) x 3.61" (H)
<b>Weight</b>	1.8 kg (4.0 lbs) max