



30 W Ext. Ku-Band Block Up Converter

KEY FEATURES

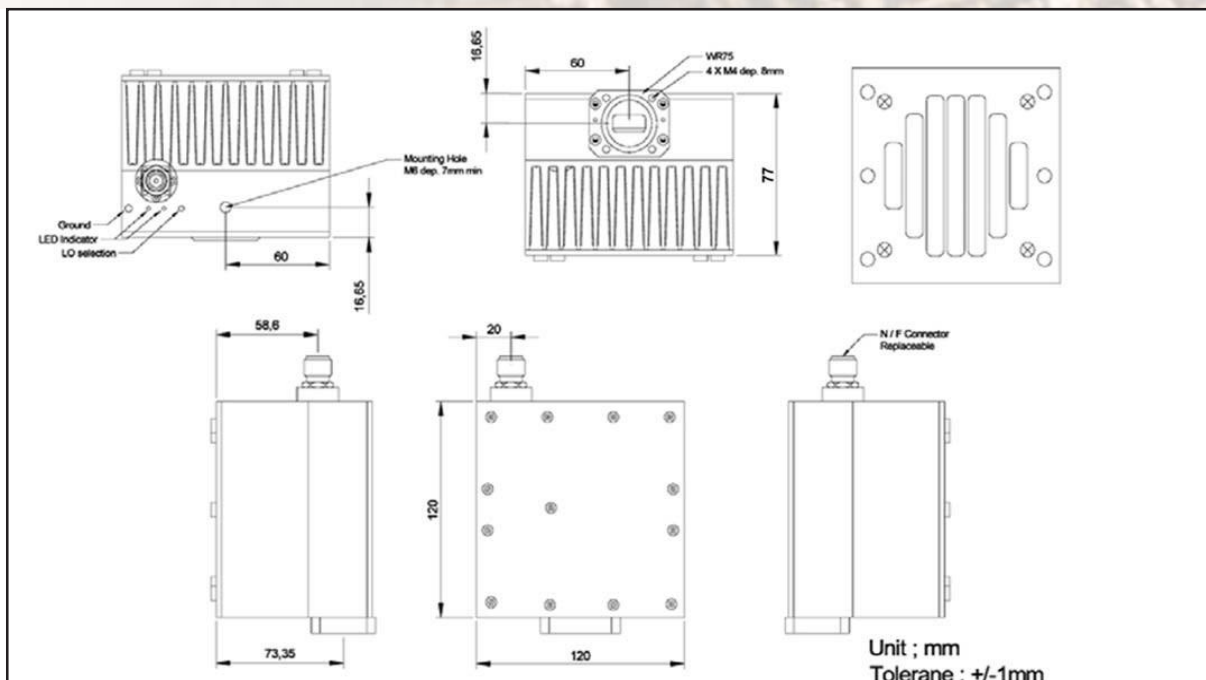
- ◆ Output frequency 13.75-14.50 GHz
- ◆ Smallest and lightest
- ◆ Double - L.O. (switchable (12.80 / 13.05 GHz)
- ◆ Auto-ranging 30-60 VDC
- ◆ Incomparable Low power consumption (176W max)
- ◆ Digital temperature compensation
- ◆ L.O. lock and amplifier LEDs
- ◆ Field-exchangeable (F/N) IF connector
- ◆ M&C - combined RS-232/485/FSK (optional)
- ◆ Internal 10MHz high stability reference (optional)
- ◆ Ethernet control (optional)
- ◆ RoHS compliant

ABE30SKX / ABE30SKXF



This smallest and lightest 30W 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 48 VDC and consumes less than 176W.

Mechanical Drawing





30 W Ext. Ku-Band Block Up Converter

TECHNICAL SPECIFICATIONS	
RF frequency	14.00 to 14.50 GHz 13.75 to 14.50 GHz
Local oscillator-switchable	13.05 GHz and 12.80 GHz
IF frequency	950 to 1,700 MHz
Output power	30W (+44.8 dBm min) (+45dBm Typ.) 15.7W P-LINEAR (+41.9 dBm min.)
IF connector	N-type or F-type (field-exchangeable)
Power supply- auto-ranging	+30~+60 VDC via IF cable, 176 W max
Output interface	WR-75 G
Gain variation over 40 MHz over 500 MHz	± 0.8 dB ± 1.5 dB
Over operating temperature	± 1.5 dB @ fixed frequency
Gain	65 dB min., 68 dB nominal
IMD3 (3dB back off rated output power)	-26 dBc max 2 signal 5MHz apart at P-LINEAR
L.O. leakage	-45 dBm max
Spurious	-53 dBc max
Requirement for external reference frequency input power	via IF cable 10MHz (sine-wave) -5 to +5 dBm @ input port
Phase noise (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
M&C	RS-232 and RS-485, Ethernet
FSK	Multiplexed on TX IFL, compatible with Comtech and Paradigm
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 RED GREEN YELLOW YELLOW blinking	Summary alarm All OK All OK standard L.O. 13.05 GHz All OK extended L.O. 12.80 GHz
Temperature range (ambient) operating storage	-40 deg C to +55 deg C -40 deg C to +75 deg C
Dimensions & housing	120 (L) x 120 (W) x 77 (H) mm 4.72" (L) x 4.72" (W) x 3.03" (H)
Weight	1.8 kg (4.0 lbs) max