



16 W Ext. Ku-Band Block Up Converter

KEY FEATURES

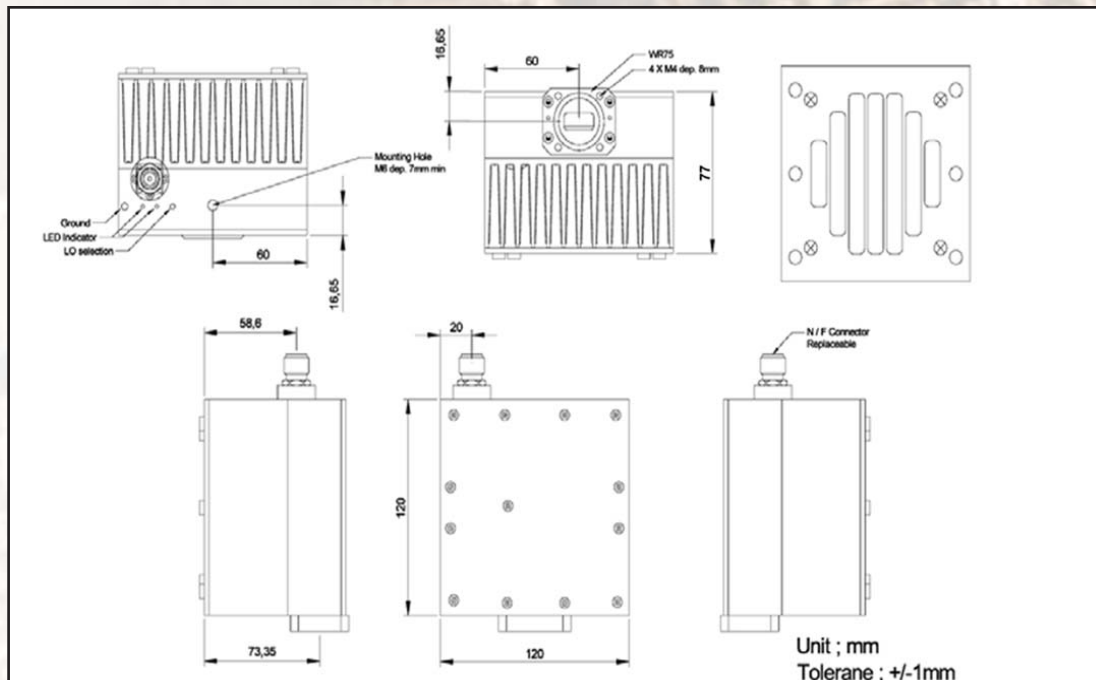
- ◆ Output frequency 13.75-14.50 GHz
- ◆ Smallest and lightest
- ◆ Double - L.O. (electronically and manually switchable (12.80 / 13.05 GHz))
- ◆ Auto-ranging 18-72 VDC
- ◆ Low power consumption (127W max)
- ◆ Digital temperature compensation
- ◆ L.O. lock and amplifier LEDs
- ◆ Field-exchangeable (F/N) 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

ABE16KX / ABE16KXF



This smallest and lightest 16W 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 127W.

Mechanical Drawing





16 W Ext. Ku-Band Block Up Converter

TECHNICAL SPECIFICATIONS		
RF frequency	L.O. 13.05 GHz L.O. 12.80 GHz	14.00 to 14.50 GHz 13.75 to 14.50 GHz
Local oscillator- electronically and manually switchable		13.05 GHz and 12.80 GHz
IF frequency		950 to 1,700 MHz
Output power @ P1dB min over temp.		16W (+42 dBm min)
IF connector		N-type or F-type (field-exchangeable)
Power supply- auto-ranging		+18 ~ +72 VDC via IF cable, 127 W max
Internal 10MHz high stability reference		10 ⁻⁸
Output interface		WR-75 G
Gain variation	over 40 MHz over 500 MHz Over operating temperature	±0.8 dB max ±1.8 dB max ±1.5 dB max @ fixed frequency
Gain		62 dB min., 68 dB max
IMD3 (3dB back off P1dB)		-25 dBc max
L.O. leakage		-33 dBm max
Spurious		-50 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)		-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
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.		2 : 1 max
Output V.S.W.R.		2 : 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