



16 W Ext. Ku-Band Block Up Converter

KEY FEATURES

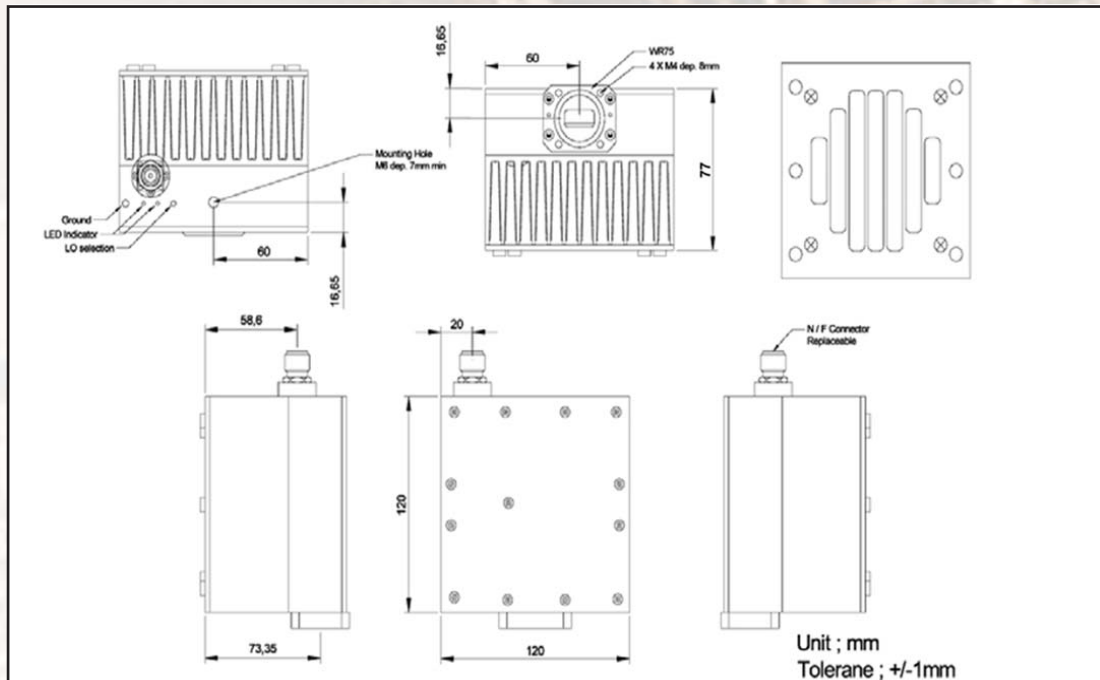
- ◆ Output frequency 13.75-14.50 GHz
- ◆ Smallest and lightest
- ◆ Double - L.O. (electronically and manually switchable 12.80 / 13.05 GHz)
- ◆ Auto-ranging and auto-detected 18-75 VDC or 80-240 VAC power options
- ◆ Incomparable low power consumption (127W max)
- ◆ Digital temperature compensation
- ◆ 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)
- ◆ Three-year warranty
- ◆ RoHS compliant

ABE16KX / ABE16KXF ABD16KX / ABD16KXF



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 can be powered either with 24/48 VDC or 110/220 VAC 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		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 ABE16KX - auto-ranging and auto-detected ABD16KX - auto-ranging		+18~+75 VDC via IF cable or MS connector, 127 W max 80~240 VAC via MS connector, 126 W max
Internal 10MHz high stability reference		10 ⁻⁸
Output interface		WR-75 G
Gain variation	over 40 MHz over 500 MHz	0.8 dB p_p 1.4 dB p_p
Over operating temperature		0.75 dB p_p @ fixed frequency
Gain		65 dB min., 68 dB nominal
IMD3		-28 dBc max
L.O. leakage		-33 dBm max
Spurious		-50 dBc max
Requirement for external reference		via IF cable
frequency		10 MHz (sine-wave)
input power		-5 to +5 dBm @ input port
Phase noise		-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 -120 dBc/Hz max @ 1 MHz
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
Input interface	ABE16KX/ABD16KX ABE16KXF/ABD16KXF	50 Ohm (N-type IF in) 75 Ohm (F-type IF in)
Status LED	RED GREEN YELLOW YELLOW blinking	Summary alarm All OK Standard L.O. 13.05 GHz 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