



12 W Ext. Ku-Band Block Up Converter

KEY FEATURES

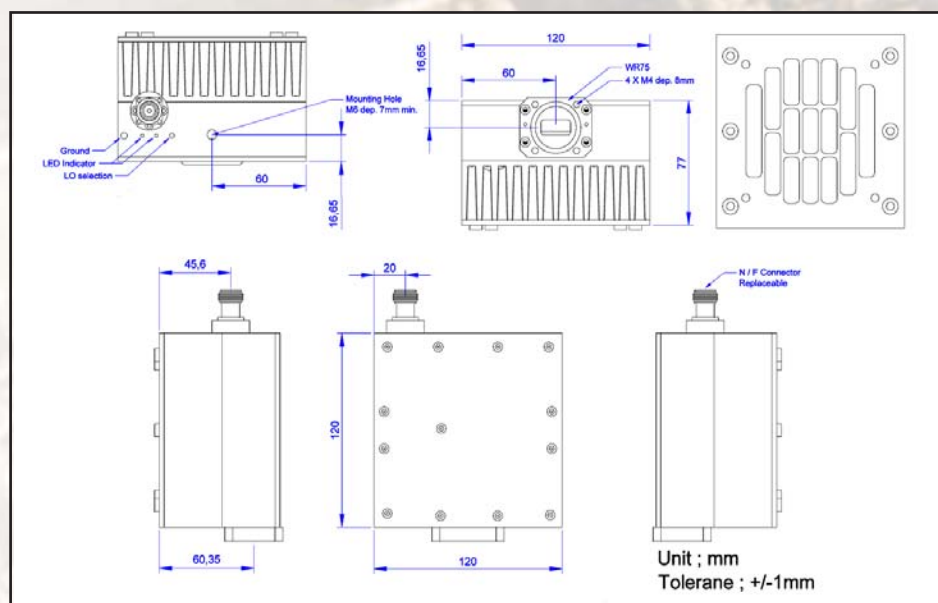
- ◆ Output frequency 13.75-14.50 GHz
- ◆ Smallest and lightest
- ◆ Double - L.O. (electronically and manually switchable 12.80 / 13.05 GHz)
- ◆ Incomparable low power consumption (65W max)
- ◆ Digital temperature compensation
- ◆ L.O. lock and amplifier LEDs
- ◆ Field-exchangeable (F/N) IF connector
- ◆ M&C - combined RS-232/485 and optional FSK
- ◆ Internal 10MHz high stability 10^{-8} reference (optional)
- ◆ Three-year warranty
- ◆ RoHS compliant

ABE12KFX / ABE12KFXF



This smallest and lightest 12W 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. Unit is powered with 24 or 48 VDC and consumes less than 65W.

Mechanical Drawing





12 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- switchable		13.05 GHz and 12.80 GHz
IF frequency		950 to 1,700 MHz
Output power @ P1dB min over temp.		12W (+41 dBm min)
IF connector		N-type or F-type (field-exchangeable)
Power supply - auto-ranging		+18~+75 VDC via IF cable, 65 W max
Internal 10MHz high stability reference		10 ⁻⁸
Output interface		WR-75 G
Gain		65 dB min., 68 dB nominal
IMD3		-28 dBc max
L.O. leakage		-33 dBm max
Spurious		-50 dBc max
Gain variation	over 40 MHz over 500 MHz	1.1 dB p_p 1.4 dB p_p
Over operating temperature		1.2 dB p_p @ fixed frequency
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	ABE12KFX ABE12KFXF	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	-40 deg C to +55 deg C
	storage	-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 3.28" (H)
Weight		1.4 kg (3.0 lbs) max