

16 W Ext. Ku-Band Block Up Converter

KEY FEATURES

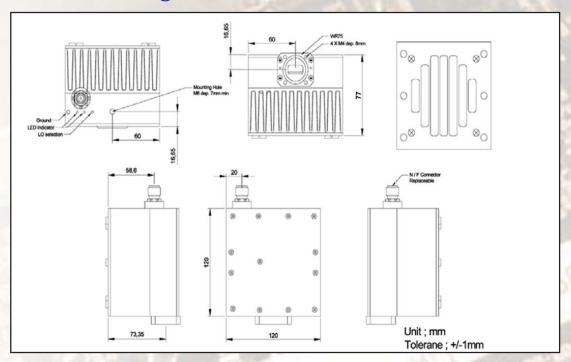
- Output frequency 13.75-14.50 GHz
- Smallest and lightest
- Double L.O. (electronically and manually switchable (12.80 / 13.05 GHz)
- Auto-ranging 15-60 VDC
- Incomparable Low power consumption (92W max)
- Digital temperature compensation
- L.O. lock and amplifier LEDs
- Field-exchangeable (F/N) IF connector
- M&C combined RS-232/485/FSK, Ethernet (optional)
- Internal 10MHz high stability 10-8 reference (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 92W.

Mechanical Drawing





16 W Ext. Ku-Band Block Up Converter

RF frequency	TECHNICAL SPECIFICATIONS	
13.05 GHz and 12.80 GHz		14.00 to 14.50 GHz
If frequency		13.75 to 14.50 GHz
Dutput power @ P1dB min over temp.		13.05 GHz and 12.80 GHz
N-type or F-type (field-exchangeable) Power supply- auto-ranging	IF frequency	950 to 1,700 MHz
Power supply- auto-ranging	Output power @ P1dB min over temp.	16W (+42 dBm min)
Internal 10MHz high stability reference	IF connector	N-type or F-type (field-exchangeable)
Output interface	Power supply- auto-ranging	
Over operating temperature	Internal 10MHz high stability reference	10 ⁻⁸
1.4 dB p_p	Output interface	WR-75 G
Over operating temperature		
Gain		
L.O. leakage	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
L.O. leakage		
Spurious		
Requirement for external reference frequency input power Phase noise (Exceeds Intelsat's standard IESS308/309) (Exceeds Intelsat's pass (IO HZ (F3 dBC/Hz max. @ 10 HZ (F3 dBC/Hz m		
Trequency input power 10MHz (sine-wave) -5 to +5 dBm @ input port -5 to +5 dBm @ input port -5 dBc/Hz max. @ 10 Hz -63 dBc/Hz max. @ 100 Hz -73 dBc/Hz max. @ 1 KHz -83 dBc/Hz max. @ 1 KHz -83 dBc/Hz max. @ 10 KHz -93 dBc/Hz max. @ 100 KHz -113 dBc/Hz max. @ 1 MHz -13		
Phase noise (Exceeds Intelsat's standard IESS308/309) (Exceeds Intelsatic Intel		
(Exceeds Intelsat's standard IESS308/309) -63 dBc/Hz max. @ 100 Hz -73 dBc/Hz max. @ 10 KHz -83 dBc/Hz max. @ 10 KHz -93 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 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 All OK YELLOW YELLOW blinking All OK extended L.O. 13.05 GHz All OK extended L.O. 12.80 GHz Environmental Operating Temperature Storage Temperature Storage Temperature Relative Humidity Dimensions & housing 120 (L) x 120 (W) x 77 (H) mm 4.72" (L) x 4.72" (W) x 3.03" (H)		-5 to +5 dBm @ input port
(Exceeds Intelsat's standard IESS308/309) -73 dBc/Hz max. @ 1 KHz -83 dBc/Hz max. @ 100 KHz -93 dBc/Hz max. @ 1 MHz M&C RS-232 and RS-485, Ethernet Multiplexed on TX IFL, compatible with Comtech and Paradigm Noise figure Input V.S.W.R. Output 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 YELLOW YELLOW All OK standard L.O. 13.05 GHz All OK extended L.O. 12.80 GHz Environmental Operating Temperature Storage Temperature Relative Humidity Dimensions & housing -40 deg C to +65 deg C -40 deg C to +75 deg C Up to 100%, Complies with IP65 Rating Dimensions & housing 120 (L) x 120 (W) x 77 (H) mm 4.72" (L) x 4.72" (W) x 3.03" (H)	Phase noise	-53 dBc/Hz max. @ 10 Hz
-73 dBc/Hz max. @ 1 KHz -83 dBc/Hz max. @ 10 KHz -93 dBc/Hz max. @ 100 KHz -93 dBc/Hz max. @ 1 MHz M&C RS-232 and RS-485, Ethernet 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 YELLOW YELLOW blinking Environmental Operating Temperature Storage Temperature Relative Humidity Dimensions & housing -40 deg C to +65 deg C -40 deg C to +75 deg C Up to 100%, Complies with IP65 Rating Dimensions & housing 120 (L) x 120 (W) x 77 (H) mm 4.72" (L) x 4.72" (W) x 3.03" (H)	(Exceeds Intoleratic standard IESS 208/200)	-63 dBc/Hz max. @ 100 Hz
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4.72" (L) x 4.72" (W) x 3.03" (H)		
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VV EIGHT	Weight	1.8 kg (4.0 lbs) max