40W Ext. Low Ku-Band Block Up Converter

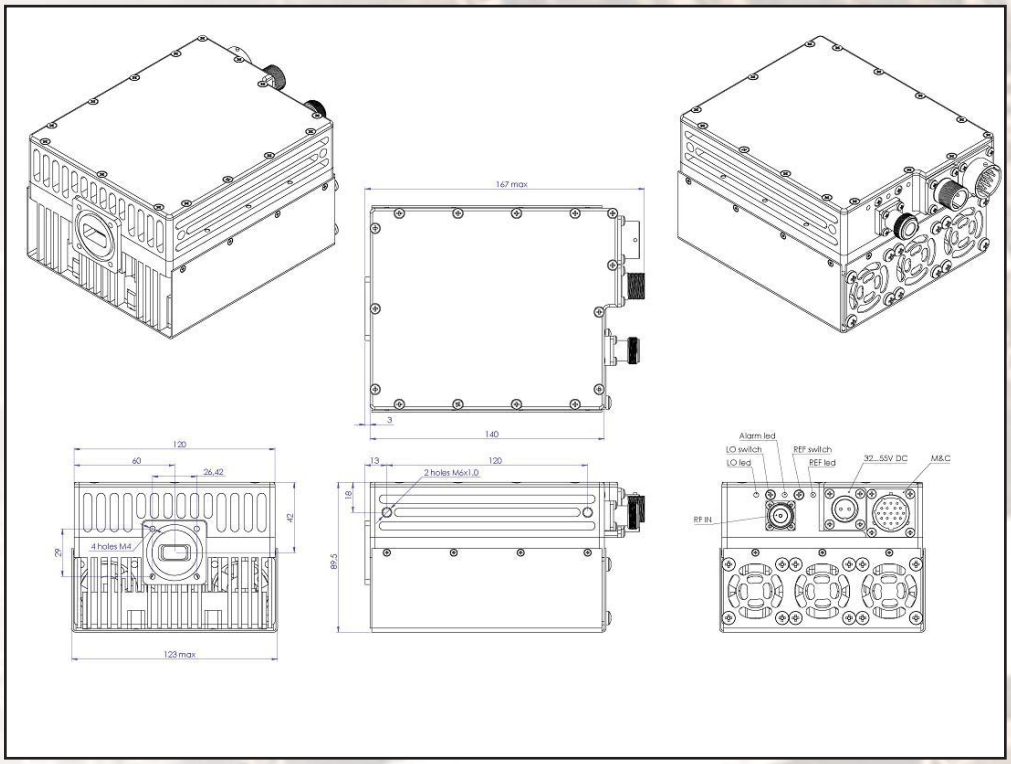
KEY FEATURES

- Output frequency 12.75-13.50 GHz
- Double L.O. (switchable 11.80 & 12.05 GHz)
- Based on GaN technology which enables high efficiency, low power consumption and high reliability
- Incomparable low power consumption (242W max.)
- Auto-ranging powering option 16 - 55 VDC
- Digital temperature compensation
- Field-exchangeable (F/N) IF connector
- Internal auto-sensing and controllable 10MHz high stability reference (optional)
- M&C - combined RS-232/485/Ethernet (HTTP and SNMP) and optional FSK
- RoHS compliant

ABE40NKXL/ABE40NKXLF

This smallest and lightest 40W L-To Low Ku-Band Block Up Converter is based on GaN technology. Incomparable low power consumption, double L.O., field-exchangeable connector, auto-sensing and controllable internal 10 MHz reference make this unit universal for any Low Ku-Band application. DC Built-in powered through the MS Connector and consumes less than 242W.

Mechanical Drawing



40W Ext. Low Ku-Band Block Up Converter

TECHNICAL SPECIFICATIONS		
RF frequency		12.75 to 13.50 GHz
Dual local oscillator		12.05 GHz and 11.80 GHz
IF frequency		950 to 1,700 MHz
Output power		40W (+46 dBm min) 20W (+43 dBm min.) P-Linear
IF connector		N-type or F-type (field-exchangeable)
Power supply auto-ranging		16 ~ 55 VDC via MS connector, 242W max.
Output interface		WR-75 G
Gain		68 dB typ.
IMD3 (two tones)		-26 dBc max. 2 signal 5 MHz apart at P-LINEAR
L.O. leakage		-45 dBm max.
Spurious		-50 dBc max.
Spectral regrowth (QPSK at 1.5x and OQPSK at 1.0x symbol rate offset with 2dB back-off from rated output power)		-30 dBc
Requirement for external reference: frequency input power		via IF cable 10 MHz (sine-wave) -5 to +5 dBm @ input port
TX Gain variation **TX Gain stability over temperature range**		± 0.5 dB over 40 MHz ± 1.8 dB over full band ± 1.5 dB typ., ± 1.8 dB max.
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
Noise power density	**Transmit** **Receive**	-80 dBm/Hz (max.) -125 dBm/Hz (max.)
Noise figure		20 dB max.
Input V.S.W.R.		1.5 : 1 max.
Output V.S.W.R.		1.5 : 1 max.
M&C		RS-232 and RS-485, Ethernet (HTTP and SNMP), FSK
Mute		Shut off the HPA if L.O. unlocked
Status LED **Amplifier** **L.O.** **10MHz**	 **RED** **GREEN** **GREEN** **GREEN blinking** **GREEN** **GREEN blinking** **RED**	 Summary alarm All OK All OK standard L.O. 12.05 GHz All OK extended L.O. 11.80 GHz External 10MHz reference Internal 10MHz reference No 10MHz reference detected
Temperature range (ambient) operating storage		 -40 deg C to +55 deg C -55 deg C to +85 deg C
Vibration and shock		Complies with MIL-STD-810E
IP rating		IP67
Dimensions & housing		140 (L) x 120 (W) x 89.5 (H) mm 5.51" (L) x 4.72" (W) x 3.52" (H)
Weight		2.2 kg (4.85 lbs) max.