

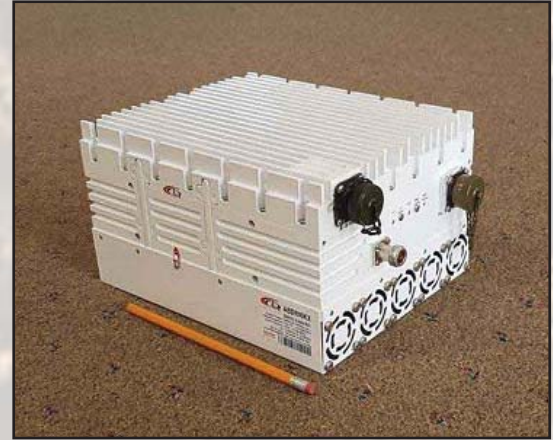


150W Ext. Ku-Band Block Up Converter

KEY FEATURES

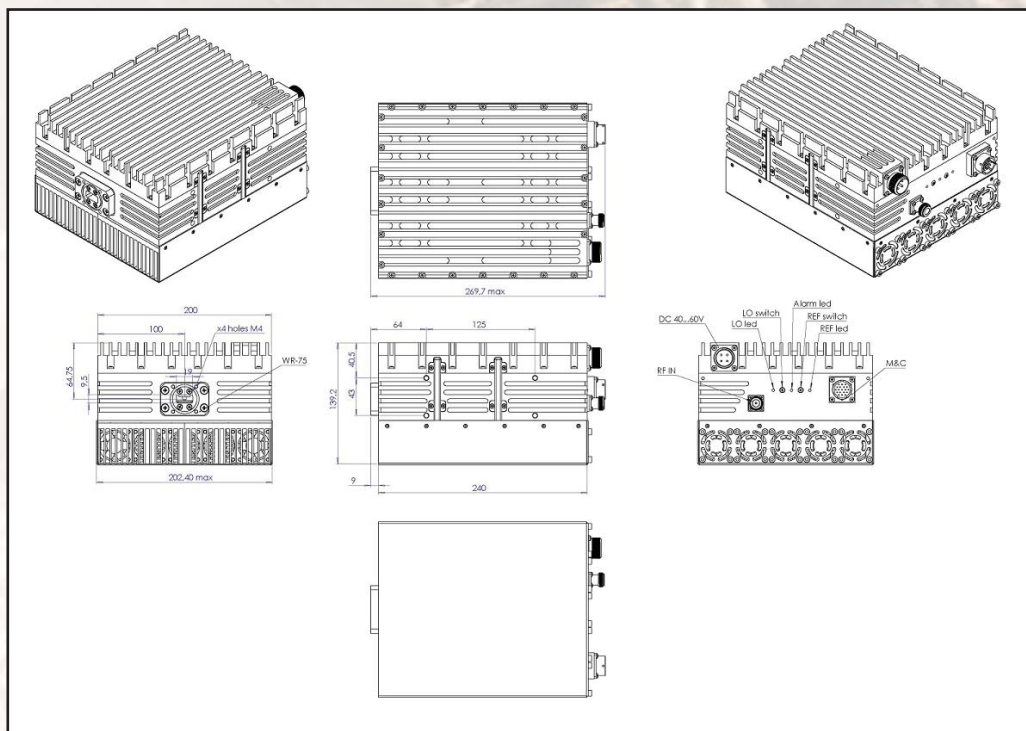
- ◆ Output frequency 13.75-14.50 GHz
- ◆ Double L.O. (switchable 12.80 & 13.05 GHz)
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability
- ◆ Incomparable low power consumption (895 W max.)
- ◆ Auto-ranging powering option 80 - 240 VAC
- ◆ Extreme P-Out GaN linearity
- ◆ Digital temperature compensation
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Internal auto-sensing and controllable 10MHz high stability reference (optional)
- ◆ Built-in redundancy option
- ◆ M&C - combined RS-232/485 and optional FSK, Ethernet control (HTTP and SNMP ver. 3)
- ◆ RoHS compliant

ABD150KX / ABD150KXF



This smallest and lightest 150W L-To 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 Ku-Band application. M&C (FSK) capability enables troubleshooting, monitoring and controlling the BUC.

Mechanical Drawing





150W Ext. Ku-Band Block Up Converter

TECHNICAL SPECIFICATIONS		
RF frequency		14.00 to 14.50 GHz 13.75 to 14.50 GHz
Dual local oscillator		12.80 GHz and 13.05 GHz
IF frequency		950 to 1,700 MHz
Output power		150W (+51.5 dBm min.) 70W (+48.5 dBm min.) P-Linear
IF connector		N-type or F-type (field-exchangeable)
Power supply auto-ranging		80 ~ 240 VAC via MS connector, 895W max.
Output interface		WR-75 G
Gain		68 dB min., 72 dB nominal
L.O. leakage		-45 dBm max.
Spurious		-53 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		± 0.5 dB over 40 MHz ± 1.8 dB over full band
TX Gain stability over temperature range		± 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	-65 dBm/Hz (max.)
	Receive	-157 dBm/Hz (max.)
Noise figure		15 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 ver.3)
Mute		Shut off the HPA if L.O. unlocked
Status LED		
Alarm LED	RED	Summary Alarm
	GREEN	OK
	GREEN blinking	MUTE
L.O.	GREEN	All OK standard L.O. 13.05 GHz
	GREEN blinking	All OK extended L.O. 12.80 GHz
10MHz Reference LED	GREEN	External 10MHz reference
	GREEN blinking	Internal 10MHz reference
	RED	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		240 (L) x 202.4 (W) x 139.2 (H) mm 9.4" (L) x 7.9" (W) x 5.48" (H)
Weight		8.5 kg (18.7 lbs) max.