



150W Full Ku-Band (12.75 to 13.25 GHz and 13.75 to 14.50 GHz) BUC

KEY FEATURES

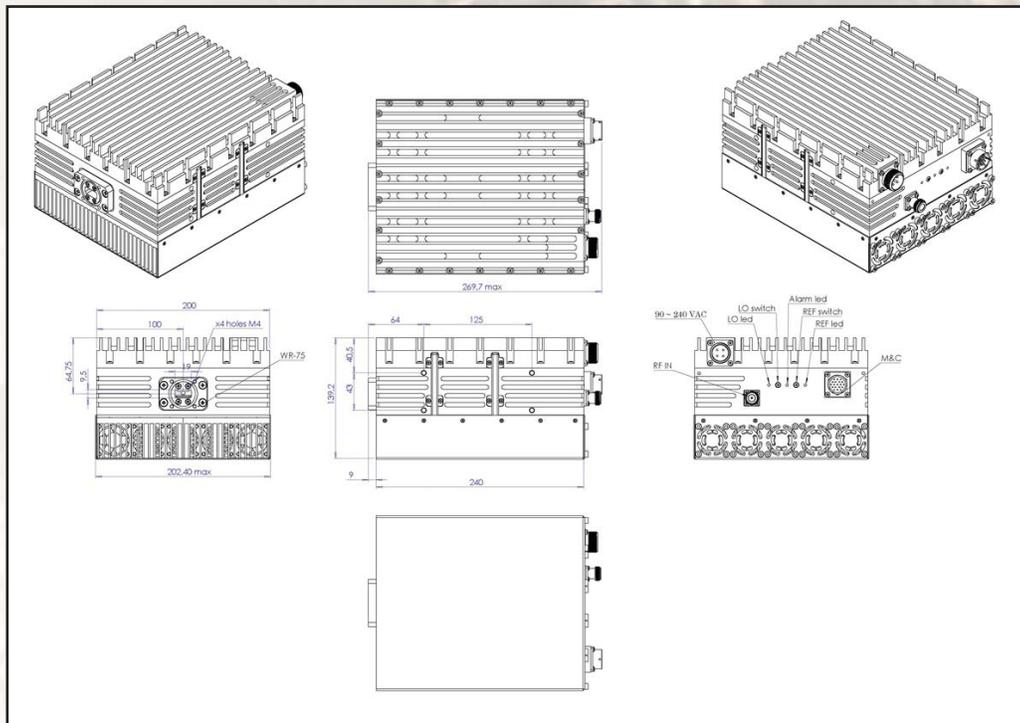
- ◆ Output frequency 12.75-13.25 GHz & 13.75-14.50 GHz
- ◆ Double L.O. (switchable 11.80 & 12.80 GHz)
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability
- ◆ Incomparable low power consumption (1070 W max.)
- ◆ Auto-ranging powering option 90 - 240 VAC
- ◆ Extreme P-Out GaN linearity (47 dBm)
- ◆ Digital temperature compensation
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Internal auto-sensing and controllable 10MHz high stability reference (optional)
- ◆ Built-in redundancy option
- ◆ Advanced M&C - combined RS-232/485 / Ethernet (HTTP and SNMP ver. 2 & 3) / FSK (optional)
- ◆ RoHS compliant

ABDF150KX / ABDF150KXF



This Special 150W Dual Ku-Band Block Up Converter is based on GaN technology, has incomparable low power consumption, double switchable L.O., field-exchangeable connector, auto-sensing and controllable internal 10 MHz reference option, and auto-ranging 90-240 VAC powering features make this unit universal for any Ku-Band application. M&C via combined RS-232/485, Ethernet control (HTTP and SNMP) and optional FSK capability enables troubleshooting, monitoring and controlling the BUC.

Mechanical Drawing



GaN Based Product



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TECHNICAL SPECIFICATIONS		
RF frequency		12.75 to 13.25 GHz 13.75 to 14.50 GHz
Dual local oscillator		11.80 GHz and 12.80 GHz
IF frequency		950 to 1,700 MHz
Output power		150W (+51.76 dBm min.) 56W (+47.48 dBm) P-Linear
IF connector		N-type or F-type (field-exchangeable)
Power supply auto-ranging		90 ~ 240 VAC via MS connector, 1070W max.
Output interface		WR-75 G
Gain		68 dB min., 72 dB nominal
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		± 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 Receive	-80 dBm/Hz (max.) -125 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-232/485 / Ethernet / FSK (optional)
Mute		Shut off the HPA if L.O. unlocked
Status LED Alarm LED L.O. 10MHz Reference LED	RED GREEN GREEN blinking GREEN GREEN blinking GREEN GREEN blinking RED	Summary Alarm OK MUTE All OK standard L.O. 12.80 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 +60 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.