

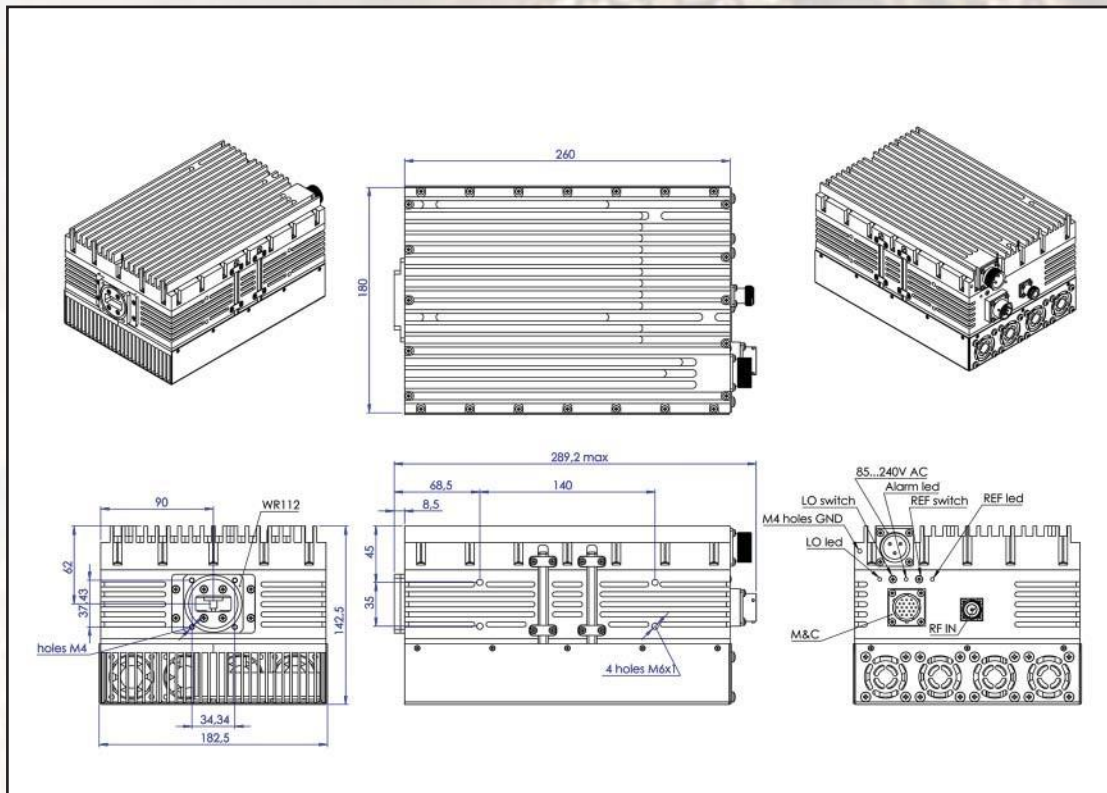


200W X-Band Block Up Converter

KEY FEATURES

- ◆ Output frequency 7.90 - 8.40 GHz
- ◆ Local oscillator 6.95 GHz
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability
- ◆ Incomparable low power consumption (986W max.)
- ◆ Auto-ranging powering option 85-260 VAC
- ◆ Internal 10MHz high stability reference (optional)
- ◆ Digital temperature compensation
- ◆ M&C - combined RS-232/485 and optional FSK, Ethernet control
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Power and lock status LED
- ◆ RoHS compliant

Mechanical Drawing



ABD200X / ABD200XF



This AC powered outdoor 200 W(min) L-To X-Band Block Up Converter is based on GaN technology which enables high efficiency, low power consumption and high reliability. The unit is equipped with M&C capability.



200W X-Band Block Up Converter

TECHNICAL SPECIFICATIONS		
RF frequency		7.90 to 8.40 GHz
Local oscillator		6.95 GHz
IF frequency		950 to 1,450 MHz
Output power		200W (+53 dBm min.)
IF connector		N-type or F-type (field-exchangeable)
Power supply : auto-ranging via MS connector		+85 ~ +260 VAC via MS conn. 986 W max.
Output interface		CPR-112G, CPR-137G, WR-112G, WR-90G
Gain		77 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)		-53 dBc/Hz max. @ 10 Hz -63 dBc/Hz max. @ 100 Hz -73 dBc/Hz max. @ 1 KHz -83 dBc/Hz max. @ 10 KHz -93 dBc/Hz max @ 100 KHz -113 dBc/Hz max @ 1 MHz
Noise power density	Transmit Receive	-66 dBm/Hz (max) -157 dBm/Hz (max)
Noise figure		20 dB max
FSK		Multiplexed on TX IFL, compatible with Comtech and Paradigm
Input V.S.W.R.		1.5 : 1 max
Output V.S.W.R.		1.5 : 1 max.
Mute		Shut off the HPA if L.O. unlocked
M&C		RS-232 and RS-485, Ethernet
Status LED	RED GREEN	Summary alarm All OK
Temperature range (ambient)		
operating		-40 deg C to +55 deg C
storage		-55 deg C to +85 deg C
Vibration and shock		Complies with MIL-STD-810E
Dimensions & housing		260 (L) x 180 (W) x 142.5 (H) mm 10.2" (L) x 7.08" (W) x 5.6" (H)
Weight		5.2 kg (11.44 lbs) max