



200W X-Band Block Up Converter

ABD200X / ABD200XF

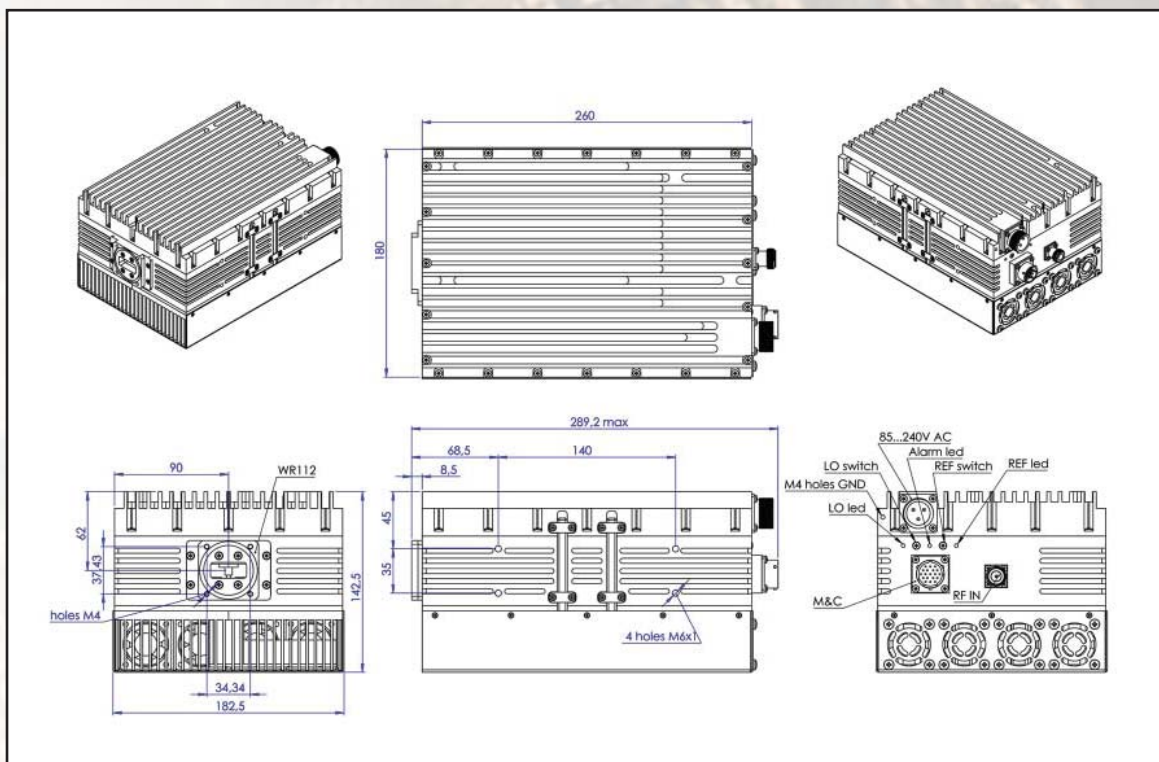
KEY FEATURES

- ◆ Output frequency 7.90 - 8.4 GHz
- ◆ L.O. 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 85 - 260 VAC powering option
- ◆ Power and lock status LED
- ◆ Digital temperature compensation
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Advanced M&C interface - combined RS-232/485, Ethernet (HTTP and SNMP ver. 2 and 3) and optional FSK
- ◆ Internal 10MHz high stability reference (optional)
- ◆ RoHS compliant



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. Unit can use either external or internal 10MHz reference.

Mechanical Drawing





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, 986W max.
Output interface		CPR-137G, CPR-112G, WR-90G, WR-112G
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:		via IF cable
frequency		10 MHz (sine-wave)
input power		-5 to +5 dBm @ input port
TX Gain variation		± 0.5 dB over 40 MHz
TX Gain stability over temperature range		± 1.8 dB over full band
		± 1.5 dB typ., ± 1.8 dB max.
Phase noise		-53 dBc/Hz max. @ 10 Hz
(Exceeds Intelsat's standard IESS308/309)		-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	-66 dBm/Hz (max.)
	Receive	-157 dBm/Hz (max.)
FSK		Multiplexed on TX IFL, compatible with Compech and Paradigm
M&C Interface		RS-232, RS-485 and Ethernet (HTTP and SNMP ver.2 and 3)
Noise figure		20 dB max.
Input V.S.W.R.		1.5 : 1 max.
Output V.S.W.R.		1.5 : 1 max.
Mute		Shut off the BUC in case of L.O. unlocked
Status LED		
Amplifier	RED	Summary alarm
	GREEN	All OK
L.O.	GREEN	All OK L.O. is set to 6.95 GHz
10MHz	GREEN	External 10MHz reference
	GREEN blinking	Internal 10MHz reference
	RED	No 10MHz reference detected
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
IP rating		IP67
Dimensions & housing		260 (L) x 180 (W) x 142.5 (H) mm
		10.23" (L) x 7.08" (W) x 5.61" (H)
Weight		5.2 kg (11.46 lbs) max.