

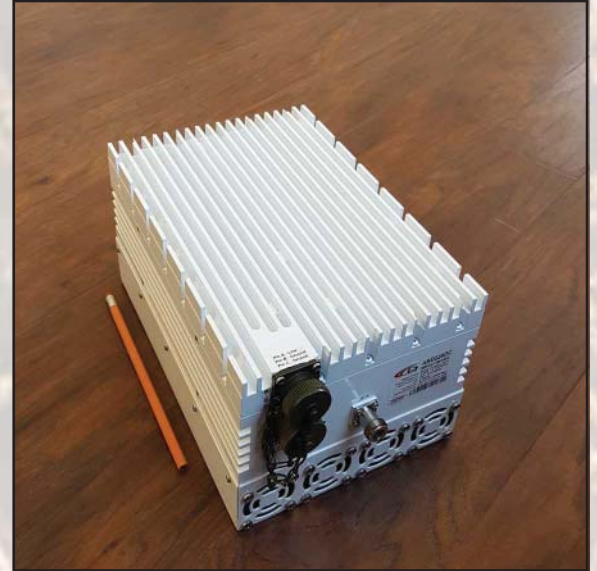


250W Ext. 5.85-6.725 GHz C-Band BUC

KEY FEATURES

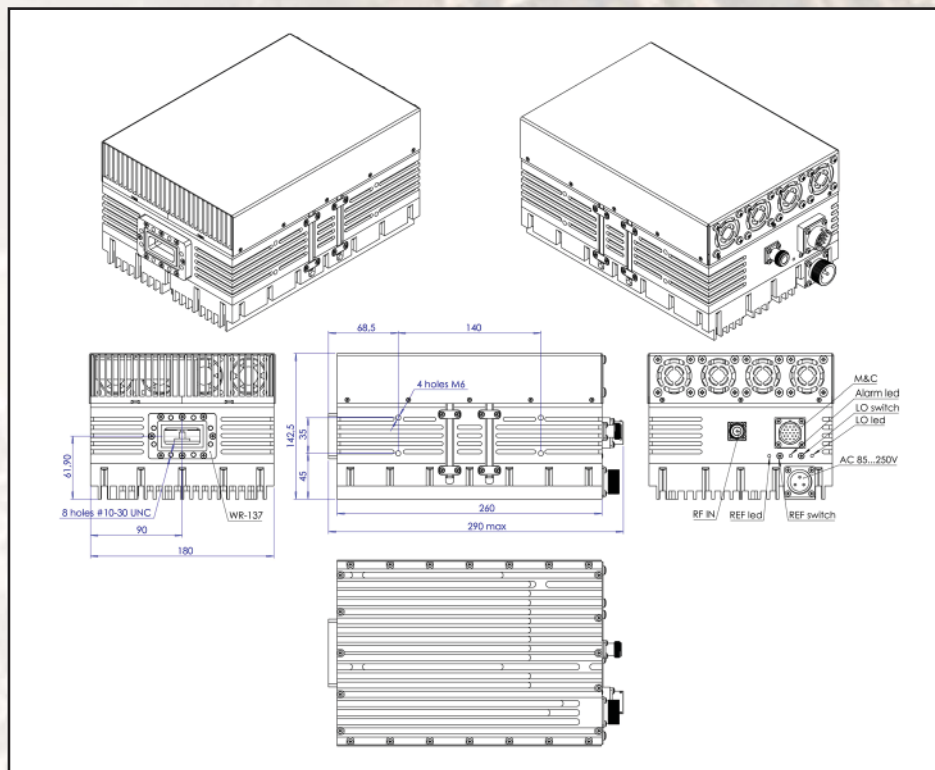
- ◆ Output frequency 5.850-6.725 GHz
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability.
- ◆ L.O. 4.9 GHz
- ◆ Incomparable low power consumption (998W max)
- ◆ Advanced M&C interface - combined RS-232/485, Ethernet (HTTP and SNMP ver. 3) and optional FSK
- ◆ Auto-ranging AC 80 - 240 VAC powering option
- ◆ Digital temperature compensation
- ◆ Power and lock status LED
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Internal 10MHz high stability reference (optional)
- ◆ RoHS compliant

ABD250DC / ABD250DCF



This is a unique Ext. C-Band (5.850-6.725 GHz) 250W Block Up Converter powered with auto-ranging 80-240 VAC unit, designed for mobile applications especially when an earth station needs to be able to use different C-Band: Standard (5.850-6.425 GHz) and Palapa (6.365-6.725 GHz) transponders or satellites.

Mechanical Drawing





250W Ext. 5.85-6.725 GHz C-Band BUC

TECHNICAL SPECIFICATIONS	
RF frequency	5.850 to 6.725 GHz
Local oscillator	4.90 GHz
IF frequency	950 to 1,825 MHz
Output power	@PSAT @ P-LINEAR 250W (+54 dBm min.) 125W (+51 dBm min.)
IF connector	N-type or F-type (field-exchangeable)
Power supply : auto-ranging via MS connector ABD180DC - auto-ranging	+80 ~ +240 VAC, 998W max. Optional 48 VDC
Output interface	CPR-137 G
Gain	77 dB nominal Adjustable in 0.5 dB steps, Gain range 20 dB
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
TX Gain stability over temperature range	± 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 -66 dBm/Hz (max) -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.3)
Noise figure	15 dB max
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
Status LED	RED GREEN Power OK, L.O. unlocked L.O. locked and amplifier functioning normally
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 (H) mm 10.2" (L) x 7.08" (W) x 5.5" (H)
Weight	5.2 kg (11.44 lbs) max