

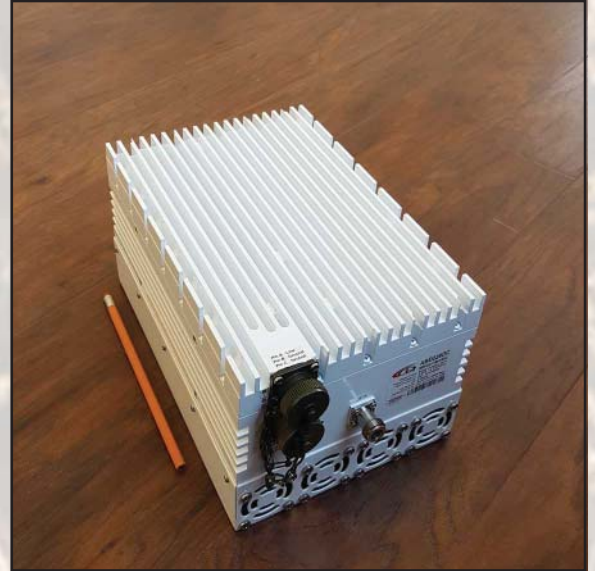


## 250W Ext. 5.85-6.725 GHz C-Band BUC

### KEY FEATURES

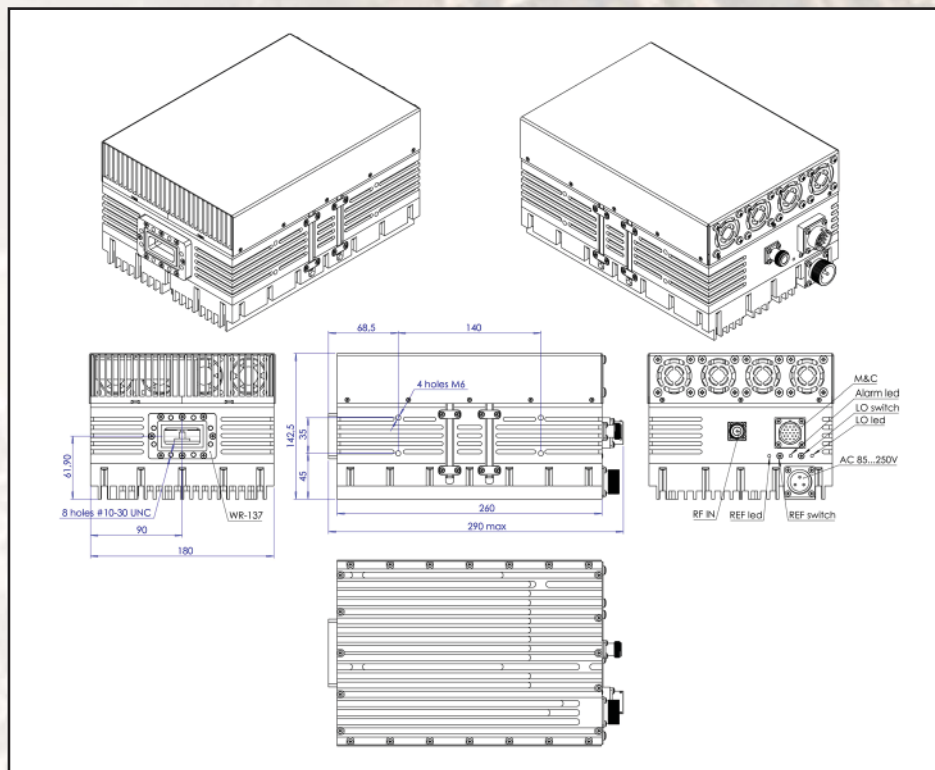
- ◆ Output frequency 5.850-6.725 GHz
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability.
- ◆ L.O. 4.9 GHz
- ◆ Incomparable low power consumption (998W max)
- ◆ Advanced M&C interface - combined RS-232/485, Ethernet (HTTP and SNMP ver. 3) and optional 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		
<b>RF frequency</b>		5.850 to 6.725 GHz
<b>Local oscillator</b>		4.90 GHz
<b>IF frequency</b>		950 to 1,825 MHz
<b>Output power</b>	<b>@PSAT</b> <b>@ P-LINEAR</b>	250W (+54 dBm min.) 125W (+51 dBm min.)
<b>IF connector</b>		N-type or F-type (field-exchangeable)
<b>Power supply : auto-ranging via MS connector</b> <b>ABD180DC - auto-ranging</b>		+80 ~ +240 VAC, 998W max. Optional 48 VDC
<b>Output interface</b>		CPR-137 G
<b>Gain</b>		77 dB nominal Adjustable in 0.5 dB steps, Gain range 20 dB
<b>IMD3 (two tones)</b>		-26 dBc max. 2 signal 5 MHz apart at P-LINEAR
<b>L.O. leakage</b>		-45 dBm max
<b>Spurious</b>		-50 dBc max
<b>Spectral regrowth</b> (QPSK at 1.5x and OQPSK at 1.0x symbol rate offset with 2dB back-off from rated output power)		-30 dBc
<b>Requirement for external reference:</b> frequency input power		<b>via IF cable</b> 10 MHz (sine-wave) -5 to +5 dBm @ input port
<b>TX Gain variation</b>		$\pm 0.5$ dB over 40 MHz $\pm 1.8$ dB over full band
<b>TX Gain stability over temperature range</b>		$\pm 1.5$ dB typ., $\pm 1.8$ dB max.
<b>Phase noise</b>  (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
<b>Noise power density</b>	<b>Transmit</b> <b>Receive</b>	-66 dBm/Hz (max) -157 dBm/Hz (max)
<b>FSK</b>		Multiplexed on TX IFL, compatible with Compech and Paradigm
<b>M&amp;C Interface</b>		RS-232, RS-485 and Ethernet (HTTP and SNMP ver.3)
<b>Noise figure</b>		15 dB max
<b>Input V.S.W.R.</b>		2 : 1 max
<b>Output V.S.W.R.</b>		2 : 1 max.
<b>Mute</b>		Shut off the HPA if L.O. unlocked
<b>Status LED</b>	<b>RED</b> <b>GREEN</b>	Power OK, L.O. unlocked L.O. locked and amplifier functioning normally
<b>Temperature range (ambient)</b>	operating  storage	-40 deg C to +55 deg C  -55 deg C to +85 deg C
<b>Vibration and shock</b>		Complies with MIL-STD-810E
<b>Dimensions &amp; housing</b>		260 (L) x 180 (W) x 142 (H) mm 10.2" (L) x 7.08" (W) x 5.5" (H)
<b>Weight</b>		5.2 kg (11.44 lbs) max