



180W Ext. 5.85-6.725 GHz C-Band BUC

KEY FEATURES

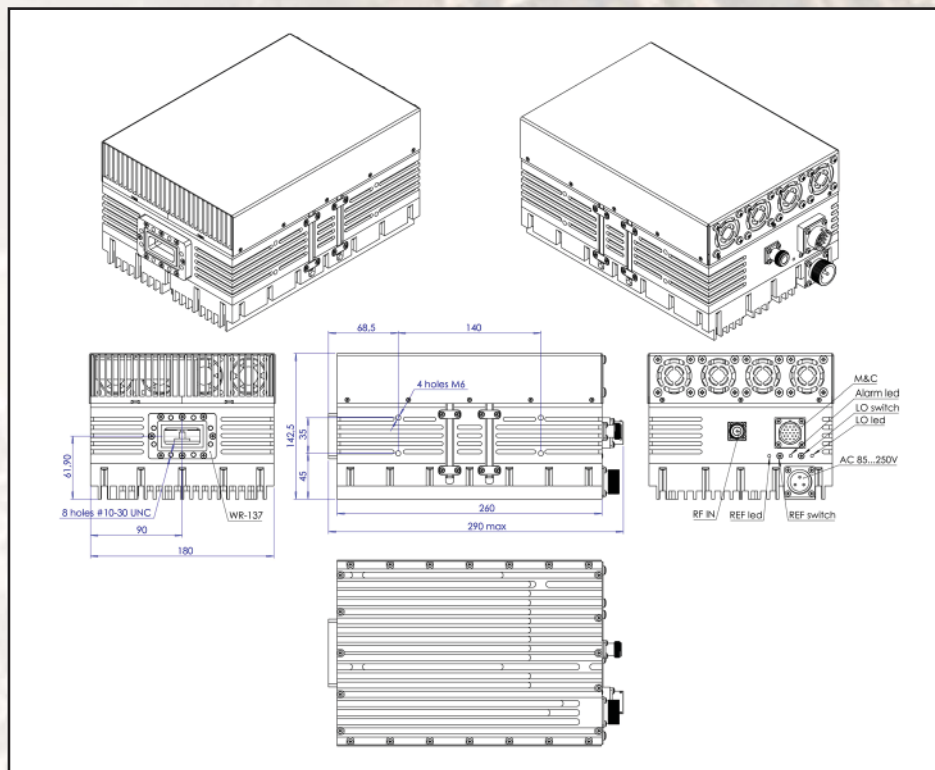
- ◆ Output frequency 5.850-6.725 GHz
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability.
- ◆ L.O. 4.9 GHz
- ◆ Incomparable low power consumption (954W max)
- ◆ Advanced M&C interface - combined RS-232/485, Ethernet (HTTP and SNMP ver. 3) and optional 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

ABD180DC / ABD180DCF



This is a unique Ext. C-Band (5.850-6.725 GHz) 180W 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





180W 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	180W (+52.5 dBm min.) 90W (+49.5 dBm min.)
IF connector		N-type or F-type (field-exchangeable)
Power supply : auto-ranging via MS connector ABD180DC - auto-ranging		+80 ~ +240 VAC, 954W 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 ± 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	-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 storage	-40 deg C to +55 deg C -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