

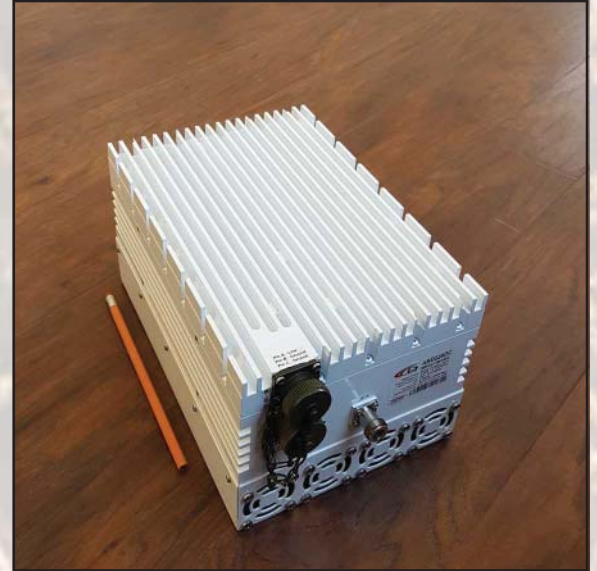


220W Ext. 5.85-6.725 GHz C-Band BUC

KEY FEATURES

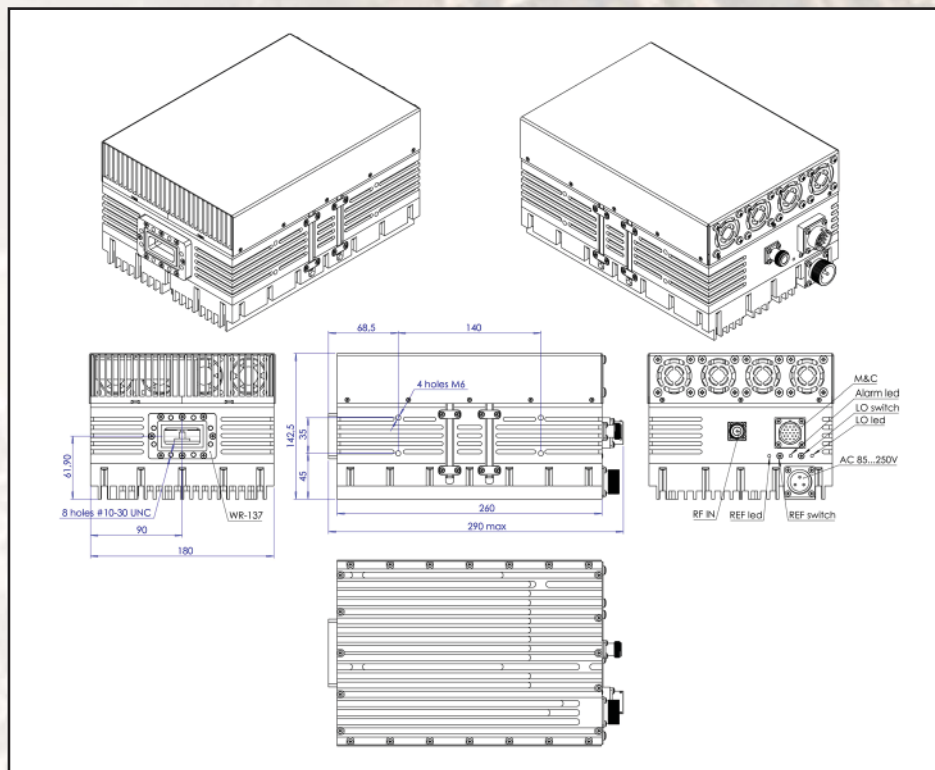
- ◆ Output frequency 5.850-6.725 GHz
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability.
- ◆ L.O. 4.9 GHz
- ◆ Incomparable low power consumption (994W max)
- ◆ Advanced M&C interface - combined RS-232/485, Ethernet (HTTP and SNMP ver. 3) and optional 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

ABD220DC / ABD220DCF



This is a unique Ext. C-Band (5.850-6.725 GHz) 220W 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





220W 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 220W (+53.4 dBm min.) 110W (+50.4 dBm min.) |
| IF connector | N-type or F-type (field-exchangeable) |
| Power supply : auto-ranging via MS connector ABD180DC - auto-ranging | +80 ~ +240 VAC, 994W 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 |
| | 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 |