

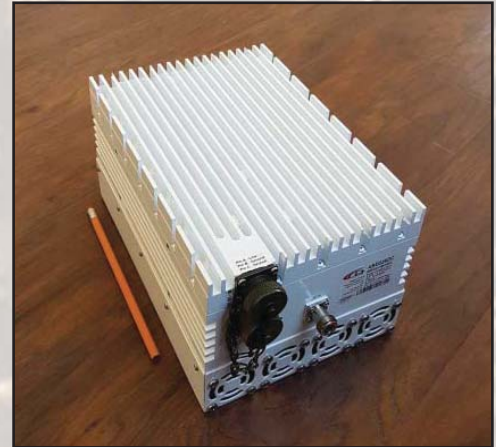


180W Ext. C-Band (5.85-6.725 GHz) BUC

KEY FEATURES

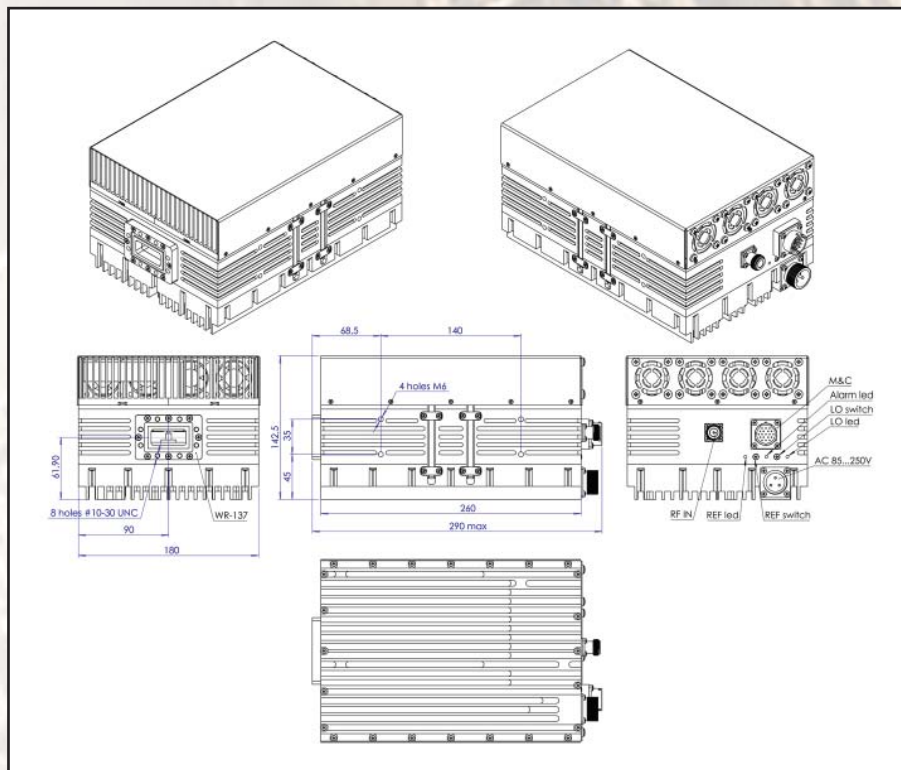
- ◆ Output frequency 5.850 GHz - 6.725 GHz
- ◆ Local oscillator 4.90 GHz
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability
- ◆ Incomparable low power consumption (800W max.)
- ◆ Auto-ranging powering option 80 - 240 VAC
- ◆ Digital temperature compensation
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Internal auto-sensing and controllable 10MHz high stability reference (optional)
- ◆ Power and lock status LED
- ◆ Built-in redundancy option
- ◆ Advanced M&C - combined RS-232/485 and optional FSK, Ethernet control (HTTP and SNMP ver.2 and 3)
- ◆ 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. C-Band (5.85-6.725 GHz) 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, 800W max. Optional 48 VDC |
| Output interface | | CPR 137 G |
| Gain | | 77 dB nominal Adjustable in 0.5 dB steps, Gain range 20 dB |
| IMD3 | | -26 dBc max. 2 signal 5MHz 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 | -60 dBm/Hz (max.) -157 dBm/Hz (max.) |
| Noise figure | | 15 dB max. |
| Input V.S.W.R. | | 1.5 : 1 max. |
| Output V.S.W.R. | | 1.5 : 1 max. |
| M&C Interface | | RS-232 and RS-485, Ethernet (HTTP and SNMP ver.2 and 3) |
| FSK | | Multiplexed on TX IFL, com. with Comtech/ Paradigm |
| Mute | | Shut off the HPA if L.O. unlocked |
| Status LED | Amplifier L.O. 10MHz | RED GREEN GREEN GREEN GREEN blinking RED |
| | | Summary alarm All OK All OK L.O. is set to 4.9 GHz External 10MHz reference Internal 10MHz reference No 10MHz reference detected |
| 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 |
| Altitude | | Up to 23,000 feet |
| 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 (11.44 lbs) max. |