



3W Ext. C-Band (5.85-6.725 GHz) BUC

KEY FEATURES

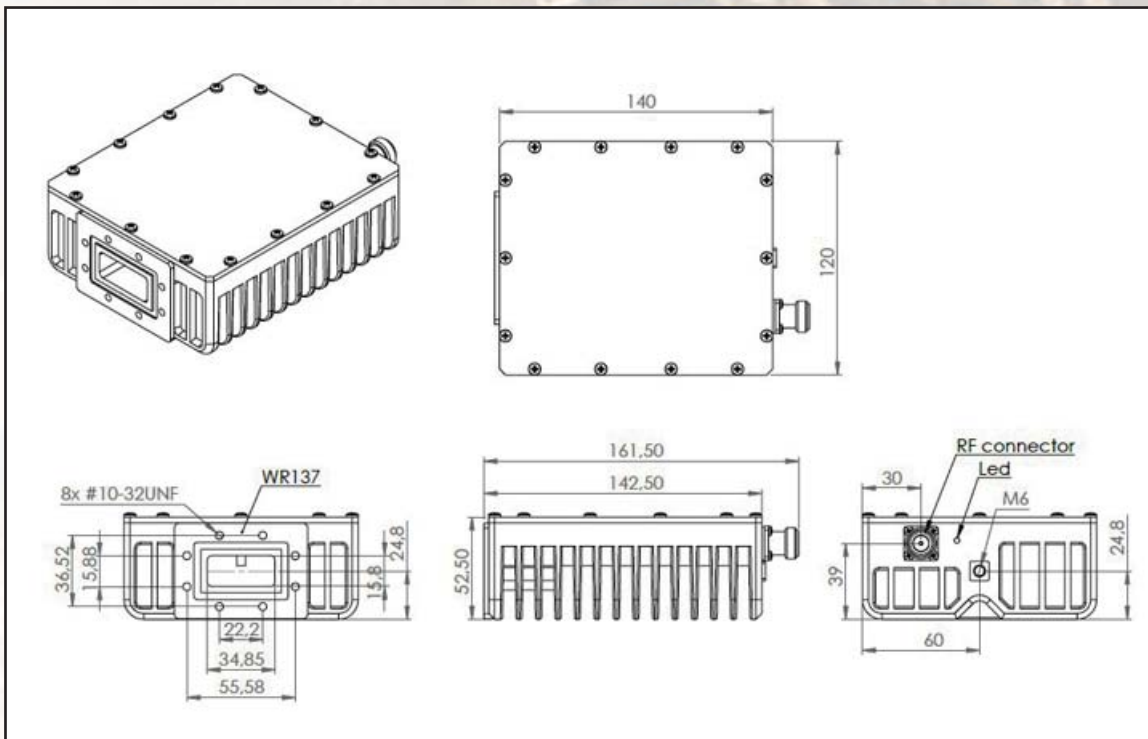
- ◆ Output frequency 5.850-6.725 GHz
- ◆ Incomparable low power consumption (17W at 34.7dBm)
- ◆ Auto-ranging 15 ~ 60 VDC powering
- ◆ Incomparable low phase noise
- ◆ Digital temperature compensation
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Internal 10MHz high stability reference (optional)
- ◆ L.O., alarm, lock LED
- ◆ RoHS compliant

ABE3DC / ABE3DCF



This smallest and lightest 3W L-To C-Band Block Up Converter is based on GaN technology. High power efficiency resulting in the lowest power consumption (0.4 amps max @ 48 VDC). The unit covers Standard (5.850-6.425 GHz) and Palapa (6.365-6.725 GHz) C-Band frequencies.

Mechanical Drawing





3W 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 | 3W (+34.7 dBm min.), P-Linear 1.7W (+32.3 dBm min.) | |
| IF connector | N-type or F-type (field-exchangeable) | |
| Power supply : auto-ranging via IF connector | +15 ~ +60 VDC via IF cable 17W max. (0.4amps @48VDC) | |
| Output interface | CPR 137 G | |
| Gain | 60 dB nominal | |
| 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 TX Gain stability over temperature range | ± 0.5 dB over 40 MHz ± 1.8 dB over full band ± 1.5 dB typ., ± 1.8 dB max. | |
| Phase noise (Exceeds Intelsat's standard IESS308/309) | -53 dBc/Hz max. @ 10 Hz -63 dBc/Hz max. @ 100 Hz -73 dBc/Hz max. @ 1 KHz -83 dBc/Hz max. @ 10 KHz -93 dBc/Hz max @ 100 KHz -113 dBc/Hz max @ 1 MHz | |
| Noise power density | Transmit Receive | -66 dBm/Hz (max) -157 dBm/Hz (max) |
| Noise figure | 15 dB max | |
| Input V.S.W.R. | 2 : 1 max | |
| Output V.S.W.R. | 2 : 1 max. | |
| Mute | Shut off the HPA if L.O. unlocked | |
| Status LED | RED GREEN YELLOW | Summary alarm All OK All OK standard L.O. 4.90 GHz |
| 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 | 140(L) x 120 (W) x 52.5 (H) mm 5.51" (L) x 4.72" (W) x 2.06" (H) | |
| Weight | 1 kg (2.2 lbs) max | |