



10W Full DBS-Band 17.3 - 18.4 GHz BUC

KEY FEATURES

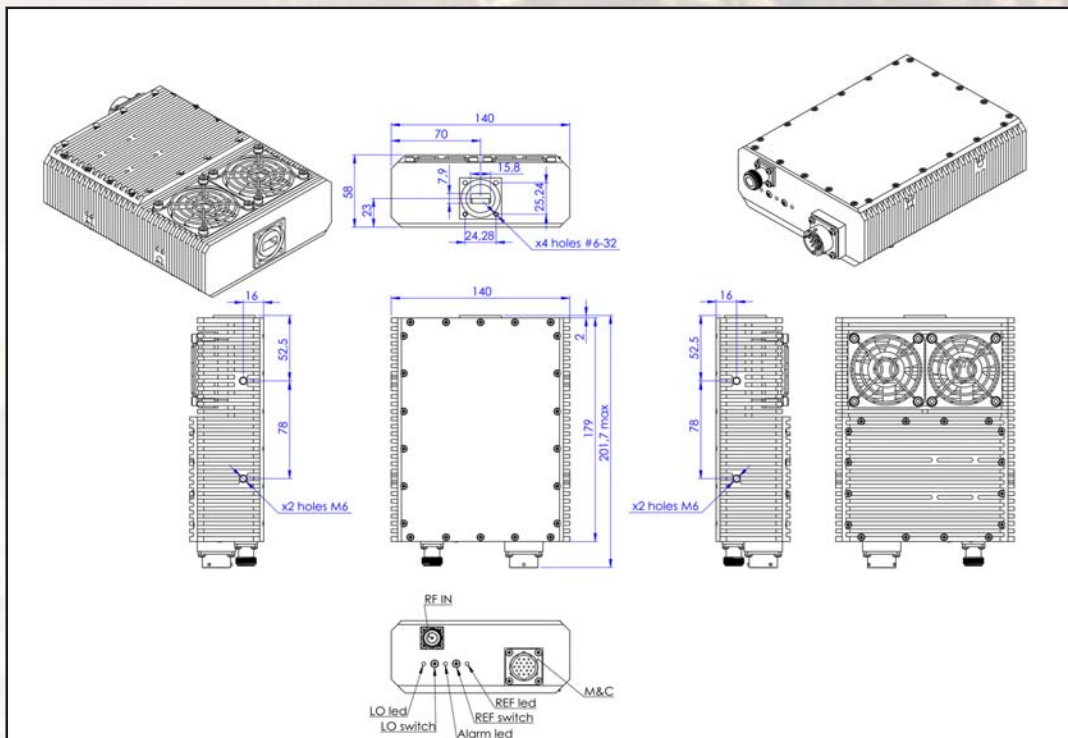
- ◆ Output frequency 17.3-18.4 GHz
- ◆ Double - L.O. (Electronically and manually switchable 16.35 and 16.85 GHz)
- ◆ Incomperably low power consumption (65W max.)
- ◆ Extreme P-Out GaN linearity
- ◆ Digital temperature compensation
- ◆ L.O. lock, amplifier and 10MHz LEDs
- ◆ Field-exchangeable (F/N) IF connector
- ◆ M&C - combined RS-232/485, FSK (optional), Ethernet (optional)
- ◆ Autosensing and controlable internal 10MHz reference (optional)
- ◆ RoHS compliant

ABE10UDBS / ABE10UDBSF



This unique smallest and lightest 10W L-To DBS-Band Block Up Converter covers the full DBS-Band frequencies (17.3-18.4GHz). M&C (FSK) capability enables trouble shooting, monitoring and controlling the BUC. Internal 10MHz reference option enables using the BUC with the modems without 10MHz reference.

Mechanical Drawing





10W Full DBS-Band 17.3 - 18.4 GHz BUC

| TECHNICAL SPECIFICATIONS | |
|---|---|
| RF frequency | 17.3 - 18.4 GHz |
| L.O.s | 16.35 GHz and 16.85 GHz |
| IF frequency for L.O. 16.35 GHz | 950 to 1,700 MHz |
| IF frequency for L.O. 16.85 GHz | 950 to 1,550 MHz |
| Output power | 10W (+40 dBm min.) |
| Output Linear power | 5.3W (+37.2 dBm min.) |
| IF connector | N-type or F-type |
| Power supply – auto-ranging | +15 VDC~+60 VDC via IF connector 65 W max |
| Output interface | WR-28 Grooved |
| Gain | 68 dB typ. |
| TX Gain variation | ± 0.5 dB over 40MHz ± 1.8 dB over full band |
| TX Gain stability over temperature range | ± 1.5 dB typ., ± 1.8 dB max. |
| IMD3 (two tones) | -25 dBc max. 2 signal 5MHz apart at P-LINEAR |
| Spurious | |
| In Band (320 KHz) | -60 dBc max. |
| In Band (Full Span) | -55 dBc max. |
| Out of Band (3GHz Span) | -55 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 | via IF cable |
| frequency | 10 MHz (sine-wave) |
| input power | -5 to +5 dBm @ input port |
| Phase noise | -55 dBc/Hz max. @ 10 Hz -66 dBc/Hz max. @ 100 Hz -77 dBc/Hz max. @ 1 KHz -86 dBc/Hz max. @ 10 KHz -95 dBc/Hz max. @ 100 KHz |
| Noise power density | |
| Transmit | -66 dBm/Hz (max) |
| Receive | -157 dBm/Hz (max) |
| M&C | RS-232, RS-485 and Ethernet (WEB and SNMP) |
| FSK | Multiplexed on TX IFL, compatible with Comtech and Paradise |
| Status LED | Summary alarm |
| RED | All OK |
| GREEN | All OK L.O. 16.35 GHz |
| GREEN BLINKING | All OK L.O. 16.85 GHz |
| GREEN | |
| Input V.S.W.R. | 1.5 : 1 max |
| Output V.S.W.R. | 1.5 : 1 max. |
| Mute | Shut off the BUC in case of L.O. unlocked |
| Temperature range (ambient) | |
| operating | -40 deg C to +55 deg C |
| storage | -55 deg C to +85 deg C |
| Dimensions & housing | 179 (L) x 140 (W) x 58 (H) mm |
| | 7.04" (L) x 5.5" (W) x 2.28" (H) |
| Weight | 2.37 kg (5.22 lbs) max |