



## 10W Full DBS-Band 17.3 - 18.4 GHz BUC

### KEY FEATURES

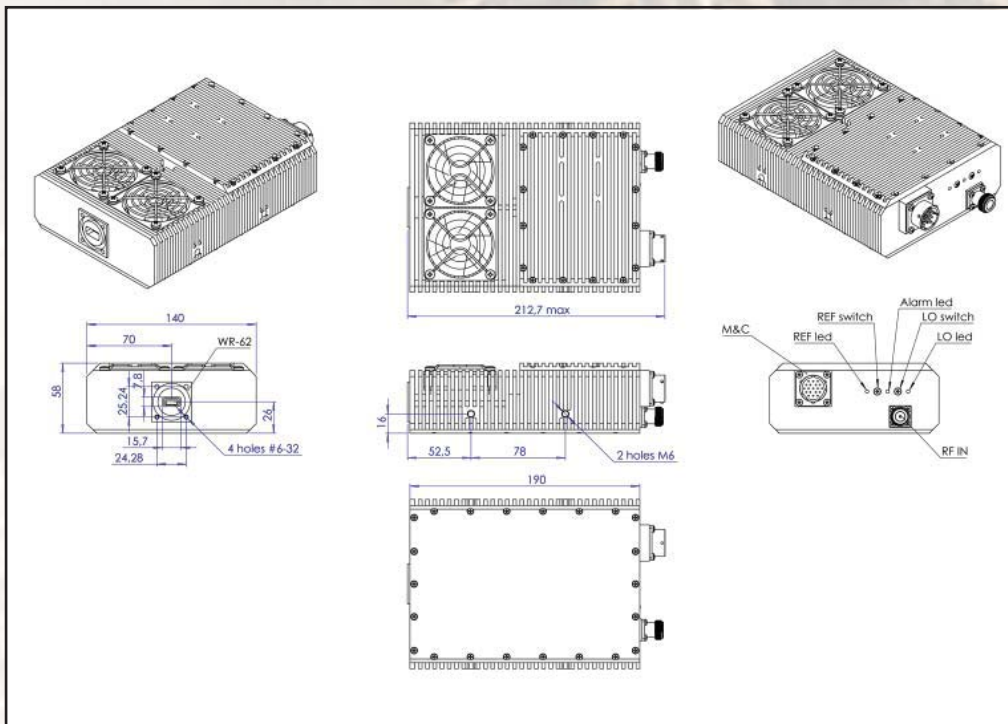
- ◆ Output frequency 17.3-18.4 GHz
- ◆ Double L.O. (electronically and manually switchable 16.35 and 16.85 GHz)
- ◆ Extreme P-Out GaN linearity
- ◆ Incomparable low power consumption (65W max.)
- ◆ Auto-ranging powering option 15-60 VDC
- ◆ High power efficiency
- ◆ Digital temperature compensation
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Power and lock status LED
- ◆ Autosensing and controllable internal 10MHz reference (optional)
- ◆ Advanced M&C - combined RS-232/485 / Ethernet (HTTP and SNMP ver. 2 & 3) / FSK (optional)
- ◆ Special Feature: Chinese GUI (optional)

### ABE10UDBS / ABE10UDBSF



This unique smallest and lightest 10W L-To DBS-Band Block Up Converter covers the full DBS-Band frequencies (17.3-18.4 GHz). 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





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TECHNICAL SPECIFICATIONS	
<b>RF frequency</b>	17.3 to 18.4 GHz
<b>Dual local oscillator</b>	16.35 and 16.85 GHz
<b>IF frequency for L.O. 16.35 GHz</b>	950 to 1,700 MHz
<b>IF frequency for L.O. 16.85 GHz</b>	950 to 1550 MHz
<b>Output power</b>	10W (+40 dBm min.)
<b>Output Linear power</b>	6.4W (+38.06 dBm min.)
<b>IF connector</b>	N-type or F-type
<b>Power supply : auto-ranging via IF connector</b>	+15 VDC ~ +60 VDC via IF connector 65W max.
<b>Output interface</b>	WR-62 Grooved
<b>Gain</b>	68 dB typ.
<b>IMD3 (two tones)</b>	-25 dBc max. 2 signal 5 MHz apart at P-LINEAR
<b>Spurious</b>	
<b>In Band (320 KHz)</b>	-60 dBc max.
<b>In Band (Full Span)</b>	-55 dBc max.
<b>Out of Band (3 GHz Span)</b>	-55 dBc max.
<b>Spectral regrowth</b> (QPSK at 1.5x and OQPSK at 1.0x symbol rate offset with 2dB back-off from rated output power)	-30 dBc
<b>Requirement for external reference:</b> frequency input power	via IF cable 10 MHz (sine-wave) -5 to +5 dBm @ input port
<b>TX Gain variation</b>	± 0.5 dB over 40 MHz ± 1.8 dB over full band
<b>TX Gain stability over temperature range</b>	± 1.5 dB typ., ± 1.8 dB max.
<b>Phase noise</b>  (Exceeds Intelsat's standard IESS308/309)	-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
<b>Noise power density</b>	
<b>Transmit</b>	-66 dBm/Hz (max.)
<b>Receive</b>	-157 dBm/Hz (max.)
<b>M&amp;C</b>	RS-232/485 / Ethernet / FSK (optional)
<b>Input V.S.W.R.</b>	1.5 : 1 max.
<b>Output V.S.W.R.</b>	1.5 : 1 max.
<b>Mute</b>	Shut off the HPA if L.O. unlocked
<b>Status LED</b>	
<b>Amplifier</b>	RED Summary alarm
<b>L.O.</b>	GREEN All OK
<b>10MHz</b>	GREEN All OK standard L.O. 16.85 GHz GREEN blinking All OK extended L.O. 16.35 GHz GREEN External 10MHz reference GREEN blinking Internal 10MHz reference RED No 10MHz reference detected
<b>Temperature range (ambient)</b> operating storage	-40 deg C to +55 deg C -55 deg C to +85 deg C
<b>IP rating</b>	IP67
<b>Dimensions &amp; housing</b>	190 (L) x 140 (W) x 58 (H) mm 7.48" (L) x 5.5" (W) x 2.28" (H)
<b>Weight</b>	2.53 kg (5.6 lbs) max.