



16W DBS-Band 17.3 - 18.4 GHz BUC

KEY FEATURES

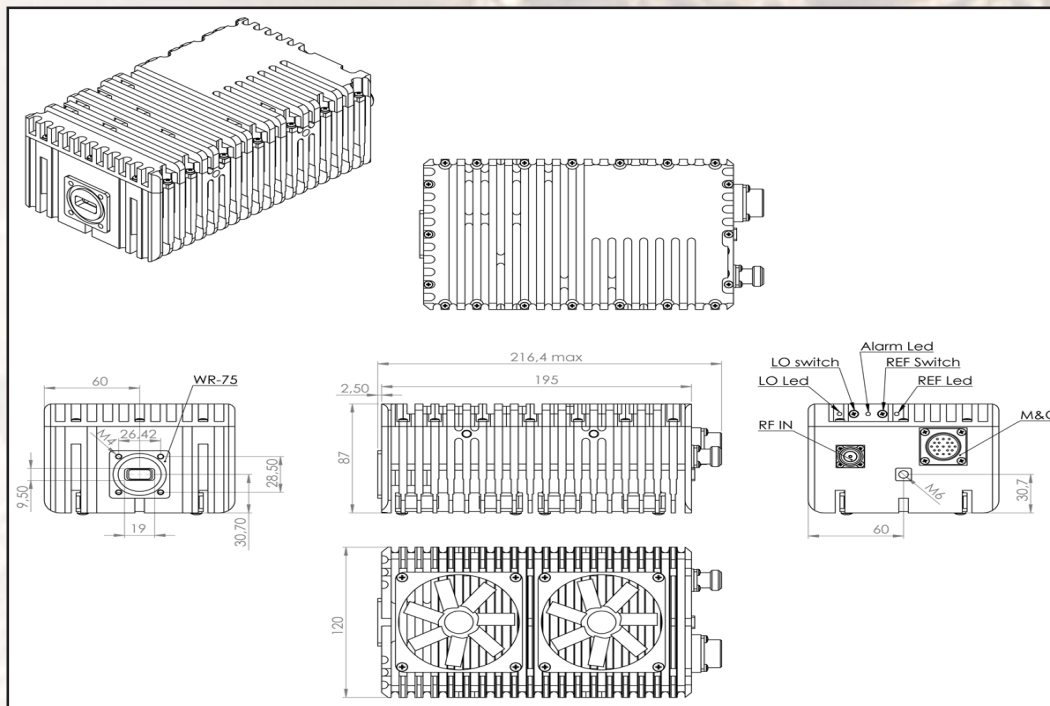
- ◆ Output frequency 17.3-18.4 GHz
- ◆ Double - L.O. (Electronically and manually switchable 16.35 and 16.70 GHz)
- ◆ Low power consumption (145W max.)
- ◆ High power efficiency (16W min over temperature)
- ◆ L.O. lock and amplifier LEDs
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Internal 10MHz high stability 10^{-8} reference (optional)
- ◆ M&C - combined RS-232/485, FSK (optional), Ethernet (optional)
- ◆ RoHS compliant
- ◆ Three-year warranty

ABC16DBS / ABC16DBSF



This unique smallest and lightest 16W L-To DBS-Band Block Up Converter covers the (17.3-18.1GHz) and (18.1-18.4GHz) frequency bands. M&C (FSK) capability enables trouble shooting, monitoring and controlling the BUC. User can choose internal 10MHz high stability reference if the corresponding modulator does not provide it.

Mechanical Drawing





16W DBS-Band 17.3 - 18.4 GHz BUC

TECHNICAL SPECIFICATIONS

RF frequency	17.3 - 18.4 GHz	
L.O.	16.35 GHz and 16.70 GHz	
IF frequency	950 to 1,700 MHz	
Output power	16W (+42 dBm min.)	
IF connector	N-type or F-type	
Power supply – auto-ranging	+30 VDC~+60 VDC via IF connector 145 W max	
Internal 10MHz high stability reference	10 ⁻⁸	
Output interface	WR-28 Grooved	
Gain	65 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	-55dBc max.	
Spectral regrowth (QPSK at 1.5x and OQPSK at 1.0x symbol rate offset with 2dB back-off from rated output power)	-30dBc	
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 -65 dBc/Hz max. @ 100 Hz -75 dBc/Hz max. @ 1 KHz -85 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 and RS-485	
FSK	Multiplexed on TX IFL, compatible with Comtech and Paradise	
Status LED	RED	Summary alarm
	GREEN	All OK
L.O. LED	GREEN BLINKING	All OK L.O. 16.35 GHz
	GREEN	All OK L.O. 16.70 GHz
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	216.5 (L) x 120 (W) x 87 (H) mm 8.5" (L) x 4.72" (W) x 3.4" (H)	
Weight	2.8 kg (6.17lbs) max	