



80W Ext. C-Band (5.85-6.725 GHz) BUC

KEY FEATURES

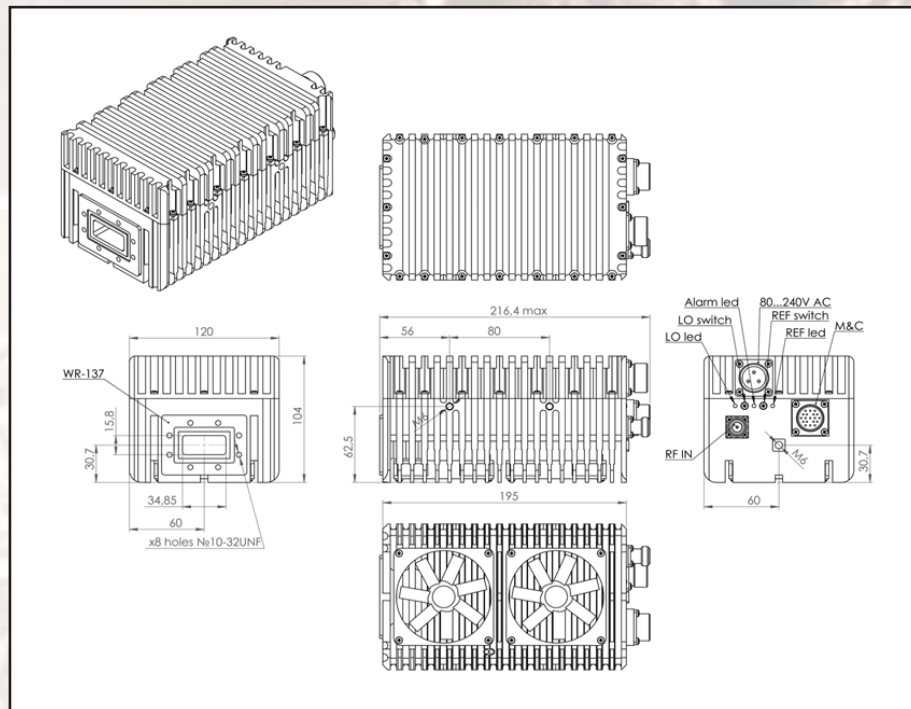
- ◆ Output frequency 5.85 GHz - 6.725 GHz
- ◆ Local oscillator 4.90 GHz
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability
- ◆ Incomparable low power consumption (300W max.)
- ◆ Auto-ranging powering option 80 - 240 VAC
- ◆ High power efficiency (80W min over temperature)
- ◆ 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 / Ethernet (HTTP and SNMP ver. 2 & 3) / FSK (optional)
- ◆ Special Feature: Chinese GUI (optional)

ABD80DC / ABD80DCF



This smallest and lightest 80W(min) L-To C-Band Block Up Converter is based on GaN technology. It could be mounted directly on a feed horn. The unit covers Standard and Palapa C-Band frequencies: 5.85-6.725 GHz.

Mechanical Drawing





80W 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	@ MIN @ PLINEAR	80W (+49 dBm min.) 42.3W (+46.2 dBm min.) P-Linear
IF connector		N-type or F-type (field-exchangeable)
Power supply auto-ranging		80 ~ 240 VAC, 300W max.
Output interface		CPR 137 G
Gain		75 dB nominal
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
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		RS-232/485 / Ethernet / FSK (optional)
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		195 (L) x 120 (W) x 104 (H) mm 7.67"(L) x 4.72"(W) x 4.09" (H)
Weight		2.96 kg (6.5 lbs) max.