

Block Up-Converter (BUC)

C-Band 20/40W

Reliability

- Highly integrated RF technologies (RFIC and GaN)
- Designed for high volume production
- Linearity optimized for high order modulation and high data rate
- Strict quality control processes resulting in <0.25% field failure rates

Product Features

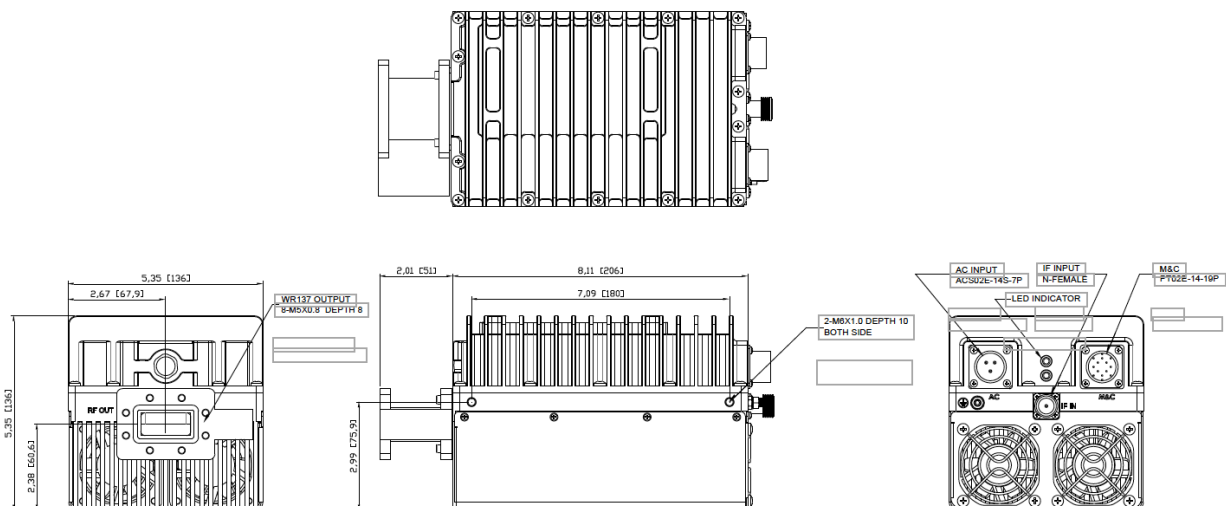
- Variable power consumption **20W:** 130W@42dBm **40W:** 220W@45dBm
- Compact and light weight (11lbs / 5kg)
- Low phase noise (exceeds IESS308/309)
- Rugged design for extreme environments (-40 to +65oC)



Typical VSAT Applications

- Maritime
- 5G Backhaul
- SNG Vehicle
- Terminals: Fixed / Portable / Transportable

Mechanical Diagram (Unit: inch (mm))



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RF Specifications

RF Frequency	5.850-6.425 GHZ 5.850-6.725 GHZ	
RF Frequency	950-1525 MHZ 950-1825 MHZ	
Local Frequency	4900MHZ	
External Reference	10 MHz, 0 ± 5 dBm	
Output Power	20W	40W
Rated/Saturated PLin ¹	43 dBm	46 dBm
PLin ²	42 dBm	45 dBm
PLin ²	41 dBm	44 dBm
PLin ³	40 dBm	43 dBm
IMD3 (33dBm)	<-25 dBc	
Small Signal Gain	70 dB	
Gain Variation	1 dB p-p / 36 MHz 3 dB p-p / 575 MHz 4 dB p-p / 875 MHz	
Gain stability	± 1.5dB p-p	
Phase Noise	-65 dBc / Hz @ 100 Hz -75 dBc / Hz @ 1 KHz -85 dBc / Hz @ 10 KHz -95 dBc / Hz @ 100 KHz	
Output Spurious	<-55 dBc	

Notes:

- PLin¹: -26 dBc regrowth, 1.5 SR (commercial satellite)
 PLin²: -30 dBc regrowth, 1.0 SR (MIL-STD-188-164B, one-carrier)
 PLin³: <-25 dBc IMD3 (MIL-STD-188-164B, two-carrier)

Power Supply

Input Power	+85 to +265 VAC (47-63Hz)	
Power Consumption @ PLin ¹ Output	20W	40W
@ Rated Output	130W	220W
@ Rated Output	160W	220W

Interfaces

RF Output Connector	WR137-G (Grooved)
RF Output VSWR	1.25:1
IF Input Connector	N-Type Female
IF Input VSWR	1.5:1
Power Supply Connector	ACS02E-14-19P
M&C Connector	PT02E-14-19P RS485, RS232 & Eth
Alarm Status Indicator	Yellow LED = PLL Unlock

Physical Parameters

Size (Inches)	8.11*5.35*5.35	
(mm)	206*136*136	
Weight (lbs)	11	
(kg)	5	
Operating Temperature	-40 to +60°C (guarantee)	
Humidity	0-100% (condensing)	
Altitude	0-40,000 feet ASL	