

Block Up-Converter (BUC)

Ku-Band 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

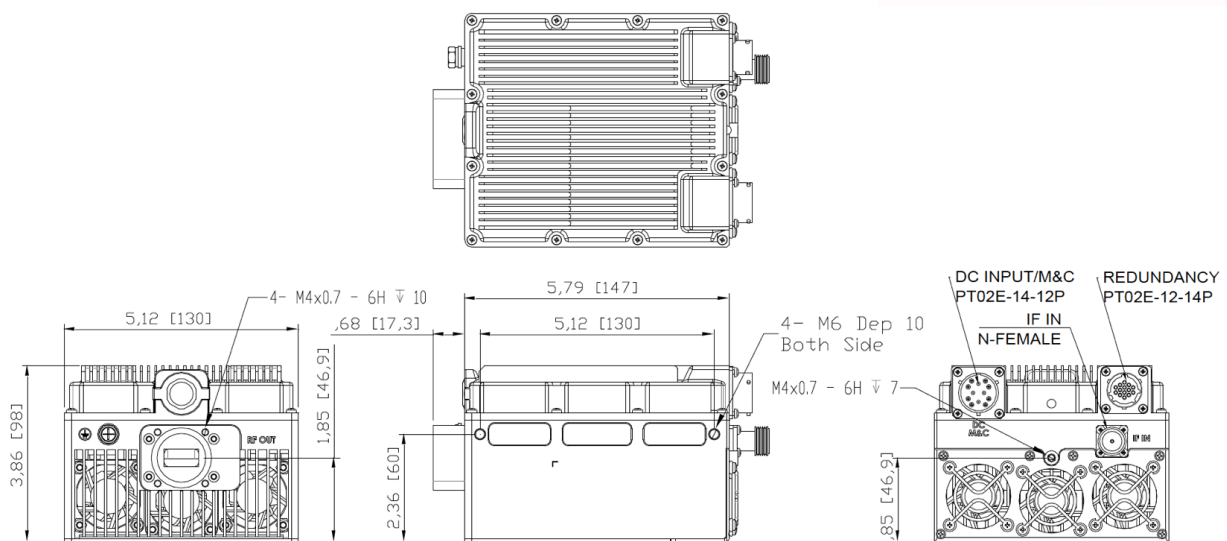
Product Features

- Variable power consumption 250W (@46dBm) 200W (@45dBm)
- Equipment redundancy port and logic integrated
- Low phase noise (exceeds IESS308/309)
- Rugged design for extreme environments (-40 to +65°C)

Typical VSAT Applications

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

Mechanical Diagram



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RF Specifications

	Standard	Extended
RF Frequency	14-14.50 MHz	13.75-14.50 GHz
IF Frequency	950-1450 MHz	950-1700 MHz
External Reference	10 MHz, 0 ± 5 dBm	
Output Power		
Saturated	46 dBm	
PLin ¹	45 dBm	
PLin ²	44 dBm	
PLin ³	43 dBm	
IMD3 (33dBm)	-25 dBc	
Small Signal Gain	70 dB	
Gain Variation	1 dB p-p / 36 MHz	
	3 dB p-p / 500 MHz	
	4 dB p-p / 750 MHz	
Gain stability	3 dB p-p	
Gain Adjustment	20 dB (Step: 0.1 dB)	
Phase Noise	-63 dBc / Hz @ 100 Hz	
	-73 dBc / Hz @ 1 KHz	
	-83 dBc / Hz @ 10 KHz	
	-93 dBc / Hz @ 100 KHz	
Output Spurious	-55 dBc	

Notes:
 PLin¹: -26 dBc regrowth, 1.5 SR
 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	+36 to +72 vDC
Power Consumption	
@ PLin1 Output	200W
@ Rated Output	250W

Interfaces

RF Output Connector	WR75-G (Grooved)
RF Output VSWR	1:25:1
IF Connector	N-Type or F-Type
IF input VSWR	1.5:1
Power and M&C Connector	PT02E-14-12P, 4 pins for power supply
M&C Connector	8 pins for M&C (RS485/Eth) SNMPv2
Alarm Status Indicator	LED (green/red)

Physical Parameters

Size	(Inches)	5.79*5.12*3.86
	(mm)	147*130*98
Weight	(lbs)	4.85
	(kg)	2.2
Operating Temperature	-40 to +60°C (guarantee)	
Humidity	0-100% (condensing)	
Altitude	0-10,000 feet ASL	