

Block Up-Converter (BUC)

Ku-Band 4W

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

- Low power consumption 30W (@36dBm)
- Compact and light weight (1 lbs / 0.5 kg)
- IFL input power or option for separate DC connector
- Low phase noise (exceeds IESS308/309)
- Rugged design for extreme environments (-40 to +60°C)

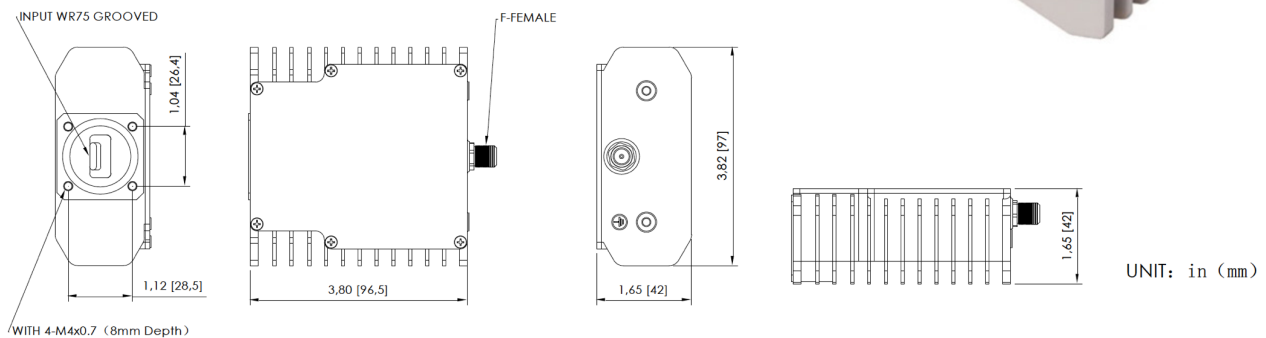


Typical VSAT Applications

- Maritime
- G Backhaul
- NG 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 | 36 dBm | |
| IMD3 (33dBm) | -25 dBc | |
| Small Signal Gain | 57 dB | |
| Gain Variation | 1 dB p-p / 36 MHz | |
| | 4 dB p-p / 500 MHz | |
| | 5 dB p-p / 750 MHz | |
| Gain stability | +/-2 dB p-p | |
| Rx Noise Density | -144 dBm/Hz @ 10.95-12.75 GHz | |
| Phase Noise | -60 dBc / Hz @ 100Hz | |
| | -70 dBc / Hz @ 1KHz | |
| | -80 dBc / Hz @ 10KHz | |
| | -90 dBc / Hz @ 100KHz | |
| Output Spurious | -55 dBc | |

Power Supply

| | |
|-----------------------------------|-----------------------------|
| Input Power | +18 to +36 vDC via IFL port |
| Power Consumption @ 36 dBm Output | 30W |

Interfaces

| | |
|------------------------|--------------------------|
| RF Output Connector | WR75-G (Grooved) |
| IF Connector | N-Type Female |
| | F-Type Female (optional) |
| RF Output VSWR | 2:1 |
| Power | IFL |
| Alarm Status Indicator | LED (green/red) |

Physical Parameters

| | | |
|-----------------------|---------------------|-------------|
| Size | (Inches) | 3.8*3.8*1.7 |
| | (mm) | 97*97*42 |
| Weight | (lbs) | 1.1 |
| | (kg) | 0.5 |
| Operating Temperature | -40 to +60°C | |
| Humidity | 0-100% (condensing) | |
| Altitude | 0-10,000 feet ASL | |