

EC-Band VSAT Block Up-Converter 10, 20, 30, 40, 50, 60, 70, 80 and 100 WATTS

AnaCom's series of ELSAT® VSAT block up-converters (BUC) are designed for continuous outdoor duty in all types of environments

Ideally suited for SCPC, MCPC, DAMA, and VoIP applications. Designed to interface with any L-band modem, the ELSAT® VSAT BUC may be used in a wide variety of communication networks.

Features

- Superior phase noise
- Flexible, universal power supply driving PA (protected from 0 volts through 250 volts AC)
- Fixed Fain Block Up-Converter
- This product joins a family of products with significant commonality
- Single enclosure for all models listed
- **Optional Item.** Summary Fault Status available through a FORM C relay. Fault status includes overheating, PA voltage failure and converter failure. This feature allows for **1+1 protected operation**, using our existing protection switch. **Note:** This feature will not show RX faults.
- **Optional Item.** 24V DC universal supply for converter operation provided internally.

Flexible Applications

- Rural telecommunications expansion
- Industrial networking
- LAN and WAN extensions

- Emergency link restoration
- Remote surveillance
- Broadcast
- Data distribution and collection
- Point-of-sales systems
- Video conferencing
- Conventional voice traffic

Compact, Functional Design

The ELSAT® VSAT BUC includes an L-band up-converter and a solid-state power amplifier (PA), into a small, highly integrated out-door package which provides excellent reliability in a wide range of environments and functions.

The only cabling required to the indoor equipment are the IF cables and AC power cables.

Benefits

- A family of products with significant commonality minimizes demands for spares and training.
- The ELSAT® VSAT BUC are designed for a minimum of maintenance. Periodic scheduled maintenance is not required.
- Designed to be mounted on most antennas
- Simple installation.

ELSAT[®] - EC

SPECIFICATIONS

| TRANSMIT CHARACTERISTICS | 10W | 20W | 30W | 40W | 50W | 60W | 70W | 80W | 100W |
|---|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|--------------------|
| 1 dB COMPRESSION POINT | 40dBm | 43dBm | 44.8 dBm | 46dBm | 47dBm | 47.8 dBm | 48.5dBm | 49dBm | 50 dBm |
| TX GAIN (Fixed) | 75 dB | 78 dB | 79.8 dB | 81 dB | 82 dB | 82 dB | 83.5 dB | 84 dB | 81 dB |
| TX LEVEL FLATNES (Fixed Temperature) | 5 dBp-p max / 500 MHz 3 dBp-p max / 36 MHz | | | | | | | | |
| TX INPUT IF FREQUENCY | 950 to 1,450 MHz | | | | | | | | |
| TX INPUT IF IMPEDANCE | 50 ohms (75 ohms optional) | | | | | | | | |
| TX INPUT IF LEVEL | -35 dBm nominal | | | | | | | | |
| TX OUTPUT FREQUENCY | 5.850 to 6.425 GHz | | | | | | | | |
| TX PHASE NOISE | -60 dBc/Hz max @ 100Hz -70 dBc/Hz max @ 1KHz -80 dBc/Hz max @ 10KHz -90 dBc/Hz max @ 100MHz | | | | | | | | |
| SPURIOUS | -50 dBc max | | | | | | | | |
| EXTERNAL REFERENCE | | | | | | | | | |
| Requirements | Provided on TXIF line by L-band modem | | | | | | | | |
| FREQUENCY | 10 MHz (sine-wave) | | | | | | | | |
| INPUT POWER | -5 to +5 dBm (at input port) | | | | | | | | |
| PHASE NOISE | -125 dBc/Hz max @ 100Hz -135 dBc/Hz max @ 1KHz -140 dBc/Hz max @ 10KHz | | | | | | | | |
| DC SUPPLY | 15 to 24 Volts @ 38W max | | | | | | | | |
| SYSTEM | | | | | | | | | |
| ALARM RELAYS | FORM C for Summary Alarm; Isolated | | | | | | | | |
| POWER | 100 to 250 VAC; 47 to 63 Hz | | | | | | | | |
| ENVIRONMENTAL | | | | | | | | | |
| TEMPERATURE | -40 to +50°C operational -60 to +75°C storage | | | | | | | | |
| ALTITUDE | 10,000 ft (3,048 meters) max | | | | | | | | |
| RAIN | 20 inches per hour | | | | | | | | |
| WIND | 150 miles per hour | | | | | | | | |
| VIBRATION | 1.0 g random operational, 2.5 g random survival | | | | | | | | |
| SHOCK | 10 g operational, 40 g survival | | | | | | | | |
| POWER & DIMENSIONS | | | | | | | | | |
| TYPICAL POWER CONSUMPTION | 125VA | 229VA | 280VA | 390VA | 394VA | 398VA | 570VA | 572VA | 762VA |
| PRIME POWER RECOMMENDATION | 340VA | 600VA | 735VA | 870VA | 880VA | 890VA | 1150VA | 1200VA | 1620VA |
| WEIGHT | 32 lbs. (14.5kg) | 39 lbs. (17.7kg) | 57 lbs. (27.3kg) | 45 lbs. (20.5kg) | 57 lbs. (27.3kg) | 57 lbs. (27.3kg) | 57 lbs. (27.3kg) | 60lbs. (27.3kg) | 75lbs. (34.1kg) |
| TRANSCEIVER SIZE - 10W | 21.6" x 9.0" x 11.6" (549 x 229 x 295 mm) | | | | | | | | |
| - 20W | 21.6" x 9.0" x 13.5" (549 x 229 x 343 mm) | | | | | | | | |
| - 40W | 21.6" x 9.0" x 14" (549 x 229 x 356 mm) | | | | | | | | |
| - 30W, 50W, 60W, 70W | 21.6" x 9.0" x 15" (549 x 229 x 381 mm) | | | | | | | | |
| - 80W | 21.6" x 9.0" x 16" (549 x 229 x 407 mm) | | | | | | | | |
| - 100W | 21.6" x 13.0" x 14" (549 x 330 x 356 mm) | | | | | | | | |

all specifications subject to change

6/04

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