ANACOM, INC. **AnaSat® - EC**

EXTENDED C-BAND VSAT TRANSCEIVER SERIES
400 WATTS

General Description

AnaCom's 400 Watt C-band VSATs are available in single or redundant configurations. Output: Waveguide. These transceivers are ruggedly built for continuous outdoor duty in all types of environments. They are especially suitable for SCPC, MCPC, and DAMA applications.

The up converter, down converter, power amplifier, monitor and control and power supply are included in a single enclosure and the only cabling required to the indoor equipment are IF cables. The LNC connects to the transceiver with a single coaxial cable. An ovenized, high stability crystal oscillator is used to lock the TX and RX synthesizers. The onboard microprocessor is used to give additional temperature and aging compensation.

Features

- Built in test facilities for improved maintainability and reduced dependence on external test equipment
- No indoor equipment is needed
- Frequency agile radio equipment. Completely independent TX and RX frequency selection
- Superior phase noise
- Flexible, universal power supply

Flexible Applications

- Rural telecommunications expansion
- Industrial networking
- LAN and WAN extensions
- Data distribution and collection
- Emergency link restoration
- Remote surveillance
- Broadcast
- Conventional voice traffic
- Point-of-Sales systems
- Video teleconferencing

Built in test equipment

To improve and simplify maintenance routines, an external terminal (or computer) can be connected to monitor a number of critical parameters without use of additional test equipment. These include:

- Transmitter power output level
- TX/RX IF input level
- Power supply voltages
- TX/RX synthesizer loop voltages
- Internal Temperature
- Alarm Details

Controllable functions from the terminal include:

- TX frequency and gain *(ON/ODD feature)*
- RX frequency and gain (*independent from TX*)

Comprehensive Monitor & Control

A powerful Monitor & Control feature allows you to monitor and control the transceiver on the same M&C bus with most indoor equipment such as modems and multiplexers. The Monitor & Control system can be used in combination with the unit's internal metering function to monitor operational parameters.

Benefits

- A family of products with significant commonality minimizes demands for spares and training
- "Last Touch" controls allow for remote configuration or local *(manual)* configuration
- Flash memory means that the transceiver always powers up with exactly the same operating conditions as when it lost power *(or was turned off)*
- Comprehensive maintenance features for operational effectiveness and minimum outages.
- Simple installation.

ANACOM, INC.
1996 Lundy Ave. San Jose, CA 95132, USA
Phone: +1 408-519-2062 FAX: +1 408-519-2063
http://www.anacominc.com

AnaSat® - EC

SPECIFICATIONS

TRANSMIT CHARACTERISTICS	**400W**
1 dB COMPRESSION POINT	+56dBm
TX GAIN	87dB
TX GAIN ADJUSTMENT RANGE	+6 to -20 dB M&C controlled
TX LEVEL FLATNESS	± 1.5 dB / 36 MHz
TX GAIN VARIATION	± 1.5 dB over frequency and temperature
TX INPUT IF FREQUENCY	52 to 88 MHz
TX INPUT IF IMPEDANCE	50 ohms (75 ohms optional)
TX INPUT IF LEVEL	-30 dBm ± 10 dB (+20 dBm MAX)
TX OUTPUT FREQUENCY	5.850 to 6.425 GHz
TX FREQUENCY STEP SIZE	1 MHz M&C controlled
TX PHASE NOISE	100 Hz: -60 dBc, 1 KHz: -70 dBc 10 KHz: -80 dBc, 100 KHz: -90 dBc
TX LINEARITY	-33 dBc (2 carriers @ 9 dB back-off)
TX INSTANTANEOUS BANDWIDTH	± 18 MHz
RECEIVER(w/LNC)CHARACTERISTICS	
RX INPUT FREQUENCY	3.625 - 4.200 GHz
RX FREQUENCY STEP SIZE	1 MHz M&C controlled
RX OUTPUT FREQUENCY	52 - 88 MHz
RX INSTANTANEOUS BANDWIDTH	± 18 MHz
RX GAIN	85 to 100 dB M&C controlled
RX GAIN VARIATION	± 1.5 dB over frequency and temperature
RX NOISE FIGURE	0.88 dB (65) MAX / Optional 0.63 dB (45K) and 0.49 dB (35K)
RX LINEARITY	-35 dBc intermod, MAX
RX PHASE NOISE	100 Hz: -60 dBc, 1 KHz: -70 dBc 10 KHz: -80 dBc, 100 KHz: -90 dBc
RX OUTPUT IMPEDANCE	50 ohms (75 ohms optional)
SYSTEM	
PORTS	1 RS-232 and 1 RS-485 / RS 232 configurable
PROTOCOL	RS-232 port supports any "dumb terminal" or ASCII interface RS-485 port supports addressed packetized data per ANACOM Supervisor™ software specifications
ALARM RELAYS	FORM C for MAJOR and MINOR alarms; isolated
VISUAL INDICATORS	GREEN LED (flashing) indicates power is active RED LED indicates a summary alarm
POWER	100 to 242 VAC; 47 - 63 Hz
ENVIRONMENTAL	
TEMPERATURE	-40 to +50°C operational -60 to +75°C storage
ALTITUDE	10,000 ft (3,000 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
REUSABLE CUSTOM DESIGNED PACKAGING	Exceeds 1 meter 10 point drop method
POWER & DIMENSIONS	
TYPICAL POWER CONSUMPTION	2832 VA
PRIME POWER REQUIREMENT	6230 VA
WEIGHT	280 lbs (127 kg)
TRANSCEIVER SIZE	38" x 25.5" x 12.36" (965 x 648 x 314 mm)
LNC SIZE / WEIGHT	3.7" x 2.8" x 3.9" (91 x 71 x 99 mm) / 0.7 lbs (0.32 kg) max.