

SUPER EXTENDED Ku-BAND VSAT TRANSCEIVER SERIES

80, 100 and 125 WATTS

AnaCom's series of Super Extended Ku-band VSAT transceivers are available in transmitter output levels of 0 dBm, 2, 4, 8, 16, 20, 23, 25, 40, 50, 60, 80, 100 and 125 watts, in single or redundant configurations. These transceivers are ruggedly built for continuous outdoor duty in all types of environments. They are especially suitable for SCPC, MCPC, and DAMA applications

Features

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

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 teleconferencing
- Conventional voice traffic

Compact, Functional Design

AnaCom's Ku-Band VSAT transceivers integrate all necessary functions into a small, highly integrated outdoor package which provides excellent reliability in a wide range of environments and functions.

The up converter, down converter, power amplifier, monitor and control and power supply are included in the small package. 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 in the TX and RX synthesizers. The onboard microprocessor is used to give additional temperature and aging compensation.

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 levels
- Power supply voltages
- TX/RX synthesizer loop voltages
- Internal Temperature
- Alarm Details

Controllable functions from the terminal include:

- TX frequency
- RX frequency (independent from TX)
- TX gain
- RX gain
- TX ON/OFF

Comprehensive Monitor & Control

A powerful Monitor and 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.



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AnaSat® - Super Extended Ku

SPECIFICATIONS

TRANSMIT CHARACTERISTICS	80W	100W	125W
1 dB COMPRESSION POINT	49 dBm	50 dBm	51 dBm
TX GAIN	80 dB	81 dB	82 dB
TX GAIN ADJUSTMENT RANGE	+6 to -20 dB M&C controlled		
TX LEVEL FLATNESS	± 1.5 dB / 36 MHz		
TX GAIN STABILITY	± 1.5 dB over temperature and frequency		
TX INPUT IF FREQUENCY	52 to 88 MHz (optional 140 MHz)		
TX INPUT IF IMPEDANCE	50 ohms (75 ohms optional)		
TX INPUT IF LEVEL	-30 dBm ± 10 dB (+20 dBm MAX)		
TX OUTPUT FREQUENCY	13.75 to 14.50 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	-30 dBc (2 carriers @ 9 dB back-off)		
TX INSTANTANEOUS BANDWIDTH	± 18 MHz		
RECEIVER_(w/LNC) CHARACTERISTICS			
RX INPUT FREQUENCY	10.95 - 12.75 GHz		
RX FREQUENCY STEP SIZE	1 MHz M&C controlled		
RX OUTPUT FREQUENCY	52 to 88 MHz		
RX INSTANTANEOUS BANDWIDTH	± 18 MHz		
RX GAIN	85 to 100 dB M&C controlled		
RX GAIN VARIATION	± 1.5 dB over temperature frequency		
RX NOISE FIGURE	1.9 dB (160°K), 1.4 dB (110°K) optional		
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 to 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	1446 VA	1617 VA	1661 VA
PRIME POWER RECOMMENDATION	3181 VA	3557 VA	3654VA
WEIGHT	127 lbs (58kg)	127 lbs (58kg)	127 lbs (58kg)
TRANSCEIVER SIZE - 80W, 100W, 125W	38.0" x 13.0" x 12.5" (965 x 330 x 318 mm)		
LNC SIZE / WEIGHT	8.4" x 2.9" x 1.8" (213 x 74 x 46 mm) / 1.2 lbs. (0.54 kg.) max.		

All specifications subject to change

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