AnaCom, Inc.

www.anacominc.com

AnaSat®

C Band

0W to 400W

EC SEC LMI-EC PC RC XC

AnaCom's series of C-band VSAT transceivers are available in transmitter output levels up to 400 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.

The upconverter, downconverter, 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. Additional temperature and aging compensation are provided by the onboard microprocessor.

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

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 and RX IF level
- Power supply voltages
- TX and RX synthesizer loop voltages
- Internal Temperature
- Alarm Details

Controllable functions from the terminal include:

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

Benefits

- "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.

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.

The M&C can be accessed remotely via-

Serial protocols:

- RS-232
- RS-485
- FSK
- Supervisor 9

Ethernet protocols:

- HTTP
- Telnet
- SNMP
- Supervisor 9

Compact, Functional Design

The upconverter, power amplifier, monitor and control and power supply are included in a single enclosure. The only cabling required to the indoor equipment are IF and power. An optional ovenized, high stability crystal oscillator can be used to lock the TX synthesizer. Additional temperature and aging compensation are provided by an onboard microprocessor.

AnaSat®

C-band Series

SPECIFICATIONS

		0W	2W	5W	10W	20W	30W	40W	50W	60W	70W	80W	100W	125W	150W	180W	200W	300W	350W	400W
TRANSMIT CHARACTERISTICS	1 dB COMPRESSION POINT (dBm)	8	33	37	40	43	44.8	46	47	47.8	48.5	49	50	51	51.8	52.6	53	54.8	55.4	56
	TX GAIN	31	64	68	71	74	75.8	77	78	78.8	79.5	80	81	82	82.8	83.6	84	85.8	86.4	87
	TX GAIN RANGE	+6/-20 dB variable in 1 dB steps via M&C																		
	TX LEVEL FLATNESS	+/- 1.5 dBp-p max / 500 MHz																		
	TX GAIN OVER TEMPERATURE	+/- 1.5 dB max																		
	TX INPUT IF FREQUENCY	52 to 88 MHz																		
	TX INPUT IF IMPEDANCE	50 ohms (75 ohms optional)																		
	TX INPUT IF LEVEL	-30 dBm for rated output with nominal gain																		
	TX OUTPUT FREQUENCY	EC = 5.850 to 6.425 GHz PC = 6.425 to 6.725 GHz							SEC = 5.850 to 6.725 GHz RC = 5.975 to 6.475 GHz						LMI-EC = 5.725 to 6.425 GHz XC = 6.725 to 7.025 GHz						
	TX FREQUENCY STEP SIZE	1 MHz M&C controlled							(XC Band 500 KHz step size)											
	TX PHASE NOISE	-60 dBc/Hz max @ 100Hz -90 dBc/Hz max @ 100KHz							-70 dBc/Hz max @ 1KHz -100 dBc/Hz max @ 1MHz						-80 dBc/Hz max @ 10KHz					
	INTERMOD	-33 dBc max (2 carriers, each 9dB backoff from P1dB rating)																		
	SPURIOUS	-55 dBc max out of band																		
RECEIVER CHARACTISTICS	RX INPUT FREQUENCY	EC = 3.625 to 4.200 GHz PC = 3.400 to 3.640 GHz							SEC = 3.400 to 4.200 GHz RC = 3.650 to 4.150 GHz						LMI-EC = 3.375 to 3.950 GHz XC = 4.500 to 4.800 GHz						
	RX FREQUENCY STEP SIZE	1 MHz M&C controlled							(XC Band 500 KHz step size)											
	RX OUTPUT FREQUENCY	52 to 88 MHz																		
	RX GAIN	75 to 100 dB M&C controlled																		
	RX NOISE FIGURE	0.9 dB (65K) MAX / Optional 0.63 dB (45K) and 0.49 dB (35K)																		
	RX LINEARITY	-35 dBc intermod, MAX																		
	RX PHASE NOISE	-60 dBc/Hz max @ 100Hz -90 dBc/Hz max @ 100KHz							-70 dBc/Hz max @ 1KHz -100 dBc/Hz max @ 1MHz						-80 dBc/Hz max @ 10KHz					
	RX OUTPUT IMPEDENCE	50 ohms (75 ohms optional)																		
SYSTEM	ALARM RELAYS	FORM C for Summary Alarm; Isolated																		
	POWER	100 to 250 VAC; 47 to 63 Hz optional 48V DC																		
	M&C	SNMP, HTTP, Telnet Ethernet, RS-232, RS-485, FSK																		
ENVIRONMENTAL	TEMPERATURE	-50 to +55°C operational -50 to +75°C storage																		
	HUMIDITY	95% at 45C																		
	ALTITUDE	6500 meters (21,500 ft) 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 (VA)	41	73	83	125	229	280	390	394	398	570	572	762	1179	1179	1539	1539	2832	2832	2832
	PRIME POWER RECOMMENDATION	100	150	220	340	600	730	870	880	890	1200	1200	1600	2400	2400	3100	3100	6200	6200	6200
	WEIGHT (lbs.)	23	27	29	34	40	43	45	57	57	67	67	67	135	164	164	164	260	260	260
	(kg.)	10	12	13	15	18	20	20	26	26	30	30	30	61	74	74	74	118	118	118

TRANSCEIVER SIZE:	- 0W	21.6" x 9.0" x 6" (549 x 229 x 152 mm)	- 50W, 60W	21.6" x 9.0" x 12.5" (549 x 229 x 317 mm)
	- 2W, 5W	21.6" x 9.0" x 7" (549 x 229 x 177 mm)	- 70W, 80W, 100W	21.6" x 13" x 11.2" (549 x 330 x 284 mm)
	- 10W	21.6" x 9.0" x 9.4" (549 x 229 x 238 mm)	- 125W, 150W, 180W, 200W	34.5" x 12.75" x 12.4" (876 x 324 x 315 mm)
	- 20W, 30W	21.6" x 9.0" x 10.3" (549 x 229 x 262 mm)	- 300W, 350W, 400W	34.5" x 25.5" x 12.36" (876 x 648 x 314 mm)
	- 40W	21.6" x 9.0" x 11.4" (549 x 229 x 289 mm)		

*all specifications subject to change 11/14/11 3887705

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