

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. An LNA configuration is also available.

## 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
- ✔ LNA configuration available

## 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-

Ethernet protocols:

- ✔ Internal Webpage
- ✔ Telnet
- ✔ SNMP
- ✔ AnaCom Supervisor 10

Serial protocols:

- ✔ RS-232
- ✔ RS-485
- ✔ AnaCom Supervisor 10

## 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.



	0W	2W	5W	10W	20W	30W	40W	50W	60W	70W	80W	100W	125W	150W	180W	200W	300W	350W	400W		
<b>TRANSMIT CHARACTERISTICS</b>	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					SEC = 5.850 to 6.725 GHz					LMI-EC = 5.725 to 6.425 GHz									
		PC = 6.425 to 6.725 GHz					RC = 5.975 to 6.475 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					-70 dBc/Hz max @ 1KHz					-80 dBc/Hz max @ 10KHz										
	-90 dBc/Hz max @ 100KHz					-100 dBc/Hz max @ 1MHz															
INTERMOD	-33 dBc max (2 carriers, each 9dB backoff from P1dB rating)																				
SPURIOUS	-55 dBc max out of band																				
<b>RECEIVER CHARACTERISTICS</b>	RX INPUT FREQUENCY	EC = 3.625 to 4.200 GHz					SEC = 3.400 to 4.200 GHz					LMI-EC = 3.375 to 3.950 GHz									
		PC = 3.400 to 3.640 GHz					RC = 3.650 to 4.150 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	LNC configuration - 75 to 100 dB M&C controlled																			
		LNA configuration - Receiver gain: 30 to 55 dB, 1dB steps, M&C controlled LNA gain: 50 - 55 dB																			
	RX NOISE FIGURE	LNC: 0.9 dB (65K) MAX / Optional 0.63 dB (45K) and 0.49 dB (35K), LNA: 0.43dB (30K)																			
RX LINEARITY	-35 dBc intermod, MAX																				
RX PHASE NOISE	-60 dBc/Hz max @ 100Hz					-70 dBc/Hz max @ 1KHz					-80 dBc/Hz max @ 10KHz										
	-90 dBc/Hz max @ 100KHz					-100 dBc/Hz max @ 1MHz															
RX OUTPUT IMPEDENCE	50 ohms (75 ohms optional)																				
<b>SYSTEM</b>	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										
<b>ENVIRONMENTAL</b>	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																				
<b>POWER &amp; DIMENSIONS</b>	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 - 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)				
	SIZE:	- 2W, 5W					21.6" x 9.0" x 7"					- 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"					- 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"					- 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"															

\*all specifications subject to change

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