AnaCom, Inc.

www.anacominc.com

AnaSat®

Ku Band

0W to 200W

Ku EKu SEKu

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

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 equipmentl
- 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-

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.

AnaSat®
Ku-Band Series

SPECIFICATIONS

		0W	2W	4W	8W	16W	20W	23W	25W	32W	40W	50W	60W	80W	100W	125W	150W	200W
TRANSMIT CHARACTERISTICS	1 dB COMPRESSION POINT (dBm)	4	33	36	39	42	43	43.6	44	45	46	47	47.8	49	50	51	51.8	53
	TX GAIN	31	64	67	70	73	74	74.6	75	76	77	78	78.8	80	81	82	82.8	84
	TX GAIN RANGE	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 (optional 140 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	Ku = 14.0 to 14.50 GHz Eku = 13.75 to 14.25 GHz SEKu = 13.75 to 14.50 GHz																
	TX FREQUENCY STEP SIZE	1 MHz M&C controlled																
	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																

RECEIVE 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 GAIN	75 to 100 dB M&C controlled
	RX NOISE FIGURE	2.0 dB (160K) MAX / Optional 1.4 dB (110K), 1.2 dB (90K), and 1.0 dB (80K)
	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 IMPEDANCE	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

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

		0W	2W	4W	8W	16W	20W	23W	25W	32W	40W	50W	60W	80W	100W	125W	150W	200W
POWER & DIMENSIONS	TYPICAL POWER CONSUMPTION (VA)	41	73	83	125	229	280	390	394	398	570	572	762	1179	1179	1539	1539	2832
	PRIME POWER RECOMMENDATION	100	150	220	340	600	730	870	880	890	1200	1200	1600	2400	2400	3100	3100	6200
	WEIGHT (lbs.)	23	27	29	34	40	43	45	57	57	67	67	67	135	164	164	164	260
	(kg.)	10	12	13	15	18	20	20	26	26	30	30	30	61	74	74	74	118

TRANSCEIVER - 0W, 2W, 4W	21.6" x 9.0" x 7" (549 x 229 x 178 mm)
SIZE: - 8W	21.6" x 9.0" x 9.4" (549 x 229 x 239 mm)
- 16W, 20W,23W, 25W	21.6" x 9.0" x 10.8" (549 x 229 x 274 mm)
- 32W	21.6" x 9.0" x 12.5" (549 x 229 x 317 mm)
- 40W, 50W, 60W	21.6" x 13.0" x 11.2" (549 x 330 x 285 mm)
- 80W, 100W	21.6" x 13.0" x 12.2" (549 x 330 x 310 mm)
- 125W, 150W, 200W	38.0" x 12.75" x 12.4" (965 x 330 x 318 mm)

*all specifications subject to change 03/15/19 3887812

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