

AnaCom's series of AnaSat® transceivers are designed for continuous outdoor duty in all types of environments. Ideally suited for SCPC, MCPC, DAMA, TDMA, and VoIP applications, the AnaSat® transceiver may be used in a wide variety of communication networks.

Features

- ✓ Superior phase noise
- ✓ Flexible, universal power supply driving PA and convertor (protected from 0 volts through 250 volts AC)
- ✓ Variable Gain Block Up-Converter
- ✓ Part of a family of products with significant commonality
- ✓ Single enclosure for all models listed
- ✓ Internal 10 MHz reference (Optional)
- ✓ Summary fault-status reporting including overheating, PA failure, and converter failure. Robust 1+1 Redundant operation using AnaCom's Protection Switch.
- ✓ Built in test feature for improved maintainability and reduced dependence on external test equipment

Built-In Test Facility

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 input level
- ✓ Power supply voltages
- ✓ TX and RX synthesizer loop voltages
- ✓ Internal Temperature
- ✓ Alarm Details
- ✓ Onboard microprocessor for automatic temperature and aging compensation

Benefits

- ✓ A family of products with significant commonality minimizes demands for spares and training
- ✓ AnaSat® transceivers are designed for a minimum of maintenance. Periodic scheduled maintenance is not required.
- ✓ Designed to be mounted on most antennas.
- ✓ Simple installation.

Compact, Functional Design

The AnaSat® transceiver includes an L-band to RF up-convertor, a solid-state power amplifier (PA), M&C, and a universal power supply all in a simple out-door package, which provides excellent reliability in a wide range of environments and functions.

The only cabling required to the indoor equipment are the IF cables and AC power cables.

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



AnaSat®

Ku-Band series

SPECIFICATIONS

	0W	2W	4W	8W	16W	20W	23W	25W	40W	50W	60W	80W	100W	125W		
TRANSMIT CHARACTERISTICS	1 dB COMPRESSION POINT (dBm)	0	33	36	39	42	43	43.6	44	46	47	47.8	49	50	51	
	TX GAIN (Nominal ± 10 dB)	30	63	66	69	72	73	73.6	74	76	77	77.8	79	80	81	
	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	+/- 2dB 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															
RECEIVER 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	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				-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)															
SYSTEM	ALARM RELAYS	FORM C for Summary Alarm; Isolated														
	POWER	100 to 250 VAC; 47 to 63 Hz				optional 48V DC										
	M&C	Optional 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)														
	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)	40	60	100	160	270	294	300	300	770	800	850	1430	1600	1640	
	PRIME POWER RECOMMENDATION	100	170	220	400	690	700	710	720	1700	1800	1900	3100	3500	3600	
	WEIGHT	(lbs.)	22	26	27	28	37	40	40	40	67	67	67	125	125	125
		(kg.)	10	12	12	13	17	18	18	18	30	30	30	57	57	57
	SIZE:	TRANSCEIVER - 0W, 2W, 4W	21.6" x 9.0" x 7" (549 x 229 x 178 mm)													
		- 8W	21.6" x 9.0" x 11.6" (549 x 229 x 295 mm)													
		- 16W, 20W, 23W, 25W	21.6" x 9.0" x 13.0" (549 x 229 x 330 mm)													
- 40W, 50W, 60W		21.6" x 13.0" x 13.6" (549 x 343 x 345 mm)														
- 80W		34.0" x 13.0" x 11.5" (864 x 229 x 292 mm)														
- 100W, 125W	38.0" x 13.0" x 12.5" (965 x 229 x 318 mm)															

*all specifications subject to change

9/17/09

3887803



Phone: +1 408-519-2062 FAX: +1 408-519-2063
<http://www.anacominc.com>