ANACOM, INC.

www.anacominc.com

AnaSat®

C Band

0W to 400W

EC SEC LMI-EC PC RC XC

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. (200W maximum)
- 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-converter, 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®

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)	0	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 (Nominal ± 10 dB)	30	63	67	70	73	74.8	76	77	77.8	78.5	79	80	81	81.8	82.6	83	84.8	85.4	86
	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																		
	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	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)	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	32	39	57	45	57	57	75	75	75	102	102	136	136	280	280	280
	(kg.)	10	12	13	15	18	26	20	26	26	34	34	34	46	46	62	62	127	127	127

TRANSCEIVER SIZE:	- 0W	21.6" x 9.0" x 6" (549 x 229 x 152 mm)	- 30W, 50W, 60W	21.6" x 9.0" x 12.5" (549 x 229 x 316 mm)
	- 2W, 5W	21.6" x 9.0" x 7" (549 x 229 x 177 mm)	- 70W , 80W, 100W	21.6" x 12.75" x 12.4" (549 x 324 x 285 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	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 9/17/09 3887703

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