







EC SEC LMC

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SEKu

AnaCom's RackSat series of rack-mounted up- and down-converters have all of the familiar features of AnaCom's outdoor converters in a compact, rack-mountable form. Ideally suited for SCPC, MCPC, DAMA, TDMA, and VoIP applications and designed to interface with any L-band modem, AnaCom RackSat converters may be used in a wide variety of communication networks.

#### **Features**

- Available in upconverter, downconverter, or dual configurations. (dual configuration EC and SEC-band only)
- ✓ Superior phase noise
- ✓ Flexible, universal power supply and convertor (protected from 0 volts through 250 volts AC)
- ✓ Variable Gain Block Up-Converter
- Part of a family of products with significant commonality
- ✓ Internal 10 MHz reference (Optional)
- ✓ Summary fault-status reporting including overheating, 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:

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

# Compact, Functional Design

The RackSat upconverter includes an L-band to RF upconverter, and a universal power supply. The RackSat downconverter includes an RF to L-band down-converter, and a universal power supply.

All of these are contained in a simple rack-mountable package, which provides excellent reliability in a wide range of functions.

# 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



### Benefits

- ✓ A family of products with significant commonality minimizes demands for spares and training
- These converters are desinged for a minimum of maintenance. Periodic scheduled maintenance is not required.
- ✓ Rack-mountable installation. (1U)



RackSat Converter	SPECIFICATIONS				
(L-Band)	EC-Band	SEC-F	Band	LMI-EC Band	
1 dB COMPRESSION POINT	8 dBm				
TX NOMINAL GAIN	25 dB				
TX GAIN RANGE	13 dB variable in 1 dB steps via M&C				
TX LEVEL FLATNESS	+/- 2 dBp-p max / 500 MHz				
TX GAIN OVER TEMPERATURE	+/- 2dB max				
TX INPUT IF FREQUENCY	950 to 1525 MHz	950 to 18	25 MHz	950 to 1525 MHz	
TX INPUT IF IMPEDANCE	50 ohms (75 ohms optional)	s (75 ohms optional)			
TX NOMINAL GAIN  TX GAIN RANGE  TX LEVEL FLATNESS  TX GAIN OVER TEMPERATURE  TX INPUT IF FREQUENCY  TX INPUT IF IMPEDANCE  TX INPUT IF LEVEL  TX LO. FREQUENCY  TX OUTPUT FREQUENCY  TX PHASE NOISE	-25 dBm typical	-25 dBm typical			
TX L.O. FREQUENCY	49	4900 MHz 4775 MHz			
TX OUTPUT FREQUENCY	5.850 to 6.425 GHz	5.850 to 6.	725 GHz	5.725 to 6.425 GHz	
TX PHASE NOISE	-60 dBc/Hz max @	-60 dBc/Hz max @ 100Hz -70 dBc/Hz max @ 1KHz			
C-Bs	-80 dBc/Hz max @ 10KHz				
SPURIOUS	-55 dBc max out of band	Bc max out of band			
RX INPUT FREQUENCY	3.625 to 4.200 GHz	3.400 to 4.	200 GHz	3.375 to 3.950 GHz	
RX L.O. FREQUENCY	5150 MHz				
RX GAIN	20 dB typical				
RX OUTPUT IMPEDENCE	50 ohms (75 ohms optional)				
	Ku-Band	Ku-Band		SEKU-Band	
1 dB COMPRESSION POINT	4 dBm				
TX NOMINAL GAIN  TX GAIN RANGE  TX LEVEL FLATNESS  TX GAIN OVER TEMPERATURE  TX INPUT IF FREQUENCY  TX INPUT IF IMPEDANCE  TX L.O. FREQUENCY  TX OUTPUT FREQUENCY  TX PHASE NOISE	25 dB				
TX GAIN RANGE	13 dB variable in 1 dB steps via M&C				
TX LEVEL FLATNESS	+/- 2 dBp-p max / 500 MHz				
TX GAIN OVER TEMPERATURE	+/- 2dB max				
TX INPUT IF FREQUENCY	950 to 1450 MHz			950 to 1700 MHz	
TX INPUT IF IMPEDANCE	50 ohms (75 ohms optional)				
TX INPUT IF LEVEL	-25 dBm typical				
TX L.O. FREQUENCY	13050 MHz			12800 MHz	
TX OUTPUT FREQUENCY TX PHASE NOISE				13.75 to 14.50 GHz	
TX PHASE NOISE	1 2 2 2 7 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2				
SPURIOUS	-80 dBc/Hz max @ 10KHz -90 dBc/Hz max @ 100KHz -55 dBc max out of band				
TEMPERATURE  HUMIDITY ALTITUDE VIBRATION SHOCK	-10 to +55°C operational				
LILIMIDITY .	-50 to +7.5°C storage				
HUMIDITY	95% at 45C 6500 meters (21,325 ft)				
ALTITUDE VIBRATION	1.0 g random operational, 2.5 g random survival				
SHOCK	10 g operational, 2.5 g random survival				
TYPICAL POWER CONSUMPTION	80 VA				
PRIME POWER RECOMMENDATION	220 VAC				
WEIGHT		9 lbs. / 4 kg.			
UNIT SIZE:		19" x 13.875" x 1.719" (48.26 x 35.24 x 43.66) [1U]			