







EC SEC LMC

Ku

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 Series	C-Band Family	Ku-Band Family	
1 dB COMPRESSION POINT (dBm)	8 dBm	4 dBm	
TX GAIN	30 dB		
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	EC-Band = 950 to 1525 MHz	Ku-Band = 950 to 1450 MHz	
	SEC-Band = 950 to 1825 MHz	SEKu-Band = 950 to 1700 MHz	
	LMI-EC Band = 950 to 1525 MHz		
TX INPUT IF IMPEDANCE	50 ohms (75 ohms optional)		
TX INPUT IF LEVEL	-30 dBm for rated output with nominal gain		
TX FREQUENCY STEP SIZE	1 MHz M&C controlled		
TX GAIN OVER TEMPERATURE TX INPUT IF FREQUENCY TX INPUT IF IMPEDANCE TX INPUT IF LEVEL TX FREQUENCY STEP SIZE TX PHASE NOISE SPURIOUS TX L.O. FREQUENCY	-60 dBc/Hz max @ 100Hz -70 dBc/Hz max @ 1KHz -80 dBc/Hz max @ 10KHz		
	-90 dBc/Hz max @ 100KHz		
SPURIOUS	-55 dBc max out of band		
TX L.O. FREQUENCY	EC-Band = 4900 MHz	Ku-Band = 13050 MHz	
·	SEC-Band = 4900 MHz	SEKu-Band = 12800 MHz	
	LMI-EC Band = 4775 MHz		
TX OUTPUT FREQUENCY	EC-Band = 5.850 to 6.425 GHz	Ku-Band = 14.0 to 14.50 GHz	
	SEC-Band = 5.850 to 6.725 GHz	SEKu-Band = 13.75 to 14.50 GHz	
	LMI-EC Band = 5.725 to 6.425 GHz		
	C-Band Only		
RX INPUT FREQUENCY	EC-Band = 3.625 to 4.200 GHz		
<u>્</u> ટ	SEC-Band = 3.400 to 4.200 GHz		
RIST	LMI-EC Band = 3.375 to 3.950 GHz		
RX GAIN	20dB typical		
RX GAIN RX OUTPUT IMPEDENCE RX L.O.	50 ohms (75 ohms optional)		
	5150 MHz		
RX OUTPUT FREQUENCY	52 to 88 MHz		
ALARM RELAYS	FORM C for Summary Alarm; Isolated		
ALARM RELAYS POWER M&C	100 to 250 VAC; 47 to 63 Hz optional 48V DC		
M&C	SNMP, HTTP, Telnet Ethernet, RS-232, RS-485		
TEMPERATURE	-10 to +55°C operational		
TEMPERATURE	-50 to +75°C storage		

S	M&C	SNMP, HTTP, Teinet Etnernet, RS-232, RS-485			
7	TEMPERATURE	-10 to +55°C operational			
NTA		-50 to +75°C storage			
ME	HUMIDITY	95% at 45C			
νος	ALTITUDE	6500 meters (21,500 ft) max			
I/A	VIBRATION	1.0 g random operational, 2.5 g random survival			
E	SHOCK	10 g operational, 40 g survival			

	TYPICAL POWER CONSUMPTION	80 VA
ONS	PRIME POWER RECOMMENDATION	220VAC
ENSI	WEIGHT UNIT SIZE:	9 lbs. / 4 kg.
DIM	UNIT SIZE:	19" x 13.875" x 1.719" [1U]
		48.26 x 35.24 x 43.66mm

^{*}all specifications subject to change 03/15/19 3888506