0 dBm, 2 and 4 Watts



AnaSat® 0Ku

GENERAL DESCRIPTION

AnaCom's Ku-Band VSAT transceivers integrate all necessary functions into a small, highly integrated out-door package which provides excellent reliability in a wide range of environments and functions. The up converter, down converter, power amplifier, monitor and control and power supply are included in a single enclosure and the only cabling required to the indoor equipment are the 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. The onboard microprocessor is used to give additional temperature and aging compensation. These transceivers are ruggedly built for continuous outdoor duty in all types of environments. They are especially suitable for SCPC, MCPC, and DAMA applications.

FEATURES

- No indoor equipment is needed
- Built in test facilities for improved maintainability and reduced dependence on external test equipment
- Frequency agile radio equipment. Completely independent TX and RX frequency selection
- Superior phase noise
- Flexible and universal power supply

FLEXIBLE APPLICATIONS

- Data distribution and collection
 - Rural telecommunications
 - Industrial networking
 - LAN and WAN extensions
 - Emergency link restoration
 - Remote surveillance
 - Broadcast
 - Point-of-Sales systems
 - Video teleconferencing
 - Conventional voice traffic

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/RX IF input level
- Power supply voltages
- TX/RX synthesizer loop voltages
- Internal Temperature
- Alarm Details

CONTROLLABLE FUNCTIONS FROM THE TERMINAL

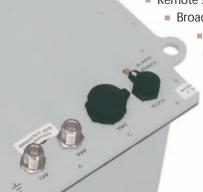
- TX frequency and gain (ON / OFF feature)
- RX frequency and gain (independent from TX)

COMPREHENSIVE MONITOR & CONTROL

This powerful 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.

BENEFITS

- A family of products with significant commonality minimizes demands for spares and training
- "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







SPECIFICATIONS

			0 dBm	2 WATTS	4 Watts
SULTEDICTION		1 dB COMPRESSION POINT	0 dBm	33 dBm	36 dBm
		TX GAIN	30 dB	64 dB	67 dB
	<u> </u>	TX GAIN ADJUSTMENT RANGE	+6 to -20 dB M&C cont		07 dB
	<u>.</u>	TX LEVEL FLATNESS	±1.5 dB / 36 MHz		
	곢		±1.5 dB over temperature and frequency		
	=	TX GAIN STABILITY			
	℥∥	TX INPUT IF FREQUENCY	52 to 88 MHz (optional 140 MHz)		
	₫	TX INPUT IF IMPEDANCE	50 ohms (75 ohms optional)		
	ᇰ	TX INPUT IF LEVEL	-30 dBm ±10 dB (+20 dBm MAX)		
ļ	=	TX OUTPUT FREQUENCY	14.0 to 14.5 GHz		
	\geq	TX FREQUENCY STEP SIZE	1 MHz M&C controlled		
	Ž	TX PHASE NOISE	100 Hz: -60 dBc, 1 KHz: -70 dBc		
	IKANSMII		10 KHz: -80 dBc, 100 KHz: -90 dBc		
		TX LINEARITY	-30 dBc (2 carriers @ 9 dB back-off)		
		TX INSTANTANEOUS BANDWIDTH	±18 MHz		
RECEIVER (W// NO CHARACTERISTICS	<u>S</u>	RX INPUT FREQUENCY	10.95 – 12.75 GHz		
	2	RX FREQUENCY STEP SIZE	1 MHz M&C controlled		
	並	RX OUTPUT FREQUENCY	52 to 88 MHz		
	A	RX INSTANTANEOUS BANDWIDTH	±18 MHz		
	A	RX GAIN	85 to 100 dB M&C controlled		
J. O.	등	RX GAIN VARIATION	±1.5 dB over temperature and frequency		
	(JNJ	RX NOISE FIGURE	1.9 dB (160°K), 1.4 dB (110°K) Optional		
	/// Y	RX LINEARITY	-35 dBc intermod, MAX		
ij		RX PHASE NOISE	100 Hz: -60 dBc, 1 KHz: -70 dBc		
	핒		10 KHz: -80 dBc, 100 KF	lz: -90 dBc	
	ᇫ	RX OUTPUT IMPEDANCE	50 ohms (75 ohms optional)		
SYSTEM		PORTS	1 RS-232, and 1 RS-485/RS-232 configurable		
		PROTOCOL	RS-232 port supports any		interface
	_		RS-485 port supports addressed packetized data per ANACOM Supervisor™ software specifications FORM C for MAJOR and MINOR alarms; isolated		
	\sim	ALARM RELAYS			
	\ \ 	VISUAL INDICATORS	GREEN LED (flashing) indicates power is active		
		RED LED indicates a summary alarm			
		POWER	100 to 242 VAC; 47 to 6		
-		TEMPERATURE	-40 to +50°C operationa		
	¥.		-60 to +75°C storage		
	Ē	ALTITUDE	15,000 ft (5,000 meters) MAX		
ENVIRONMENTAL		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		
	ī	REUSABLE CUSTOM DESIGNED PACKAGING	Exceeds 1 meter 10 point drop method		
		Exceeds 1 meter to point drop method			
2			411/4	40)//	01\/\
		PRIME POWER REQUIREMENT TYPICAL POWER CONSUMPTION	41VA 100VA	69VA 175VA	91VA 225VA
	¥	WEIGHT	22 lbs	26 lbs	27 lbs
	OIHER	WEIGHT	(10 kg)	(11.8 kg)	(12.3 kg)
	0	TRANSCEIVER SIZE — 0 dBm, 2W, 4W	(10 kg) 21.6" x 9.0" x 7.0" (549 x		(12.3 Kg)
		LNC SIZE / WEIGHT	8.4" x 2.9" x 1.8" (213 x 74		lkal may
		LING SIZE / WEIGHT	0.4 X Z.7 X I.O (Z I 3 X / 4	x 40 11111) / 1.73 IDS (0.80	луј Шах.



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