100 Watts



AnaSat® 100EC

GENERAL DESCRIPTION AnaCom's series of Extended

AnaCom's series of Extended C-band VSAT transceivers are available in several transmitter output levels up to 100 Watts, in single or redundant configurations. Output: Waveguide. These transceivers are ruggedly built for continuous outdoor duty in all types of environments. They are especially suitable for SCPC, MCPC, and DAMA applications.

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 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.

FEATURES

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

FLEXIBLE APPLICATIONS

Rural telecommunications expansion

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

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

A powerful Monitor & Control 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

100 WATTS

	1 dB COMPRESSION POINT	50 dBm
S	TX GAIN	81 dB
\mathbb{R}^{2}	TX GAIN ADJUSTMENT RANGE	+6 to -20 dB M&C controlled
ERIST	TX LEVEL FLATNESS	±1.5 dB / 36 MHz
世	TX GAIN VARIATION	±1.5 dB over frequency and temperature
Ų	TX INPUT IF FREQUENCY	52 to 88 MHz
ARA(TX INPUT IF IMPEDANCE	50 ohms (75 ohms optional)
금	TX INPUT IF LEVEL	-30 dBm ±10 dB (+20 dBm MAX)
	TX OUTPUT FREQUENCY	5.850 to 6.425 GHz
	TX FREQUENCY STEP SIZE	1 MHz M&C controlled
TRANSMIT	TX PHASE NOISE	100 Hz: -60 dBc, 1 KHz: -70 dBc
₹		10 KHz: -80 dBc, 100 KHz: -90 dBc
F	TX LINEARITY	-33 dBc (2 carriers @ 9 dB back-off)
	TX INSTANTANEOUS BANDWIDTH	±18 MHz

ICS	RX INPUT FREQUENCY	3.625 – 4.200 GHz
ERISTI	RX FREQUENCY STEP SIZE	1 MHz M&C controlled
出	RX OUTPUT FREQUENCY	52 to 88 MHz
Ď	RX INSTANTANEOUS BANDWIDTH	±18 MHz
ARAC	RX GAIN	85 to 100 dB M&C controlled
\exists	RX GAIN VARIATION	±1.5 dB over frequency and temperature
(ON)	RX NOISE FIGURE	0.9 dB (65K) MAX / Optional 0.63 dB (45K) and 0.49 dB (35K)
VER (W/LNC)	RX LINEARITY	-35 dBc intermod, MAX
	RX PHASE NOISE	100 Hz: -60 dBc, 1 KHz: -70 dBc
		10 KHz: -80 dBc, 100 KHz: -90 dBc
분	RX OUTPUT IMPEDANCE	50 ohms (75 ohms optional)

1 RS-232 and 1 RS-485 / RS 232 configurable
RS-232 port supports any "dumb terminal" or ASCII interface RS-485 port supports addressed packetized data per ANACOM Supervisor™ software specifications
FORM C for MAJOR and MINOR alarms; isolated
GREEN LED (flashing) indicates power is active RED LED indicates a summary alarm
100 to 242 VAC; 47 to 63 Hz

AL	TEMPERATURE	-40 to +50°C operational -60 to +75°C storage
불	ALTITUDE	15,000 ft (5,000 meters) MAX
₹	RAIN	20 inches per hour
Z	WIND	150 miles per hour
18	VIBRATION	1.0 g random operational, 2.5 g random survival
\geq	SHOCK	10 g operational, 40 g survival
ш	REUSABLE CUSTOM DESIGNED PACKAGING	Exceeds 1 meter 10 point drop method

Ē	~	TYPICAL POWER CONSUMPTION PRIME POWER RECOMMENDATION	762VA 1620W
	Ħ	WEIGHT	75 lbs (34.1 kg)
		TRANSCEIVER SIZE — 100W	21.6" x 13" x 14" (549 x 330 x 356 mm)
		LNC SIZE / WEIGHT	3.7" x 2.8" x 3.9" (91 x 71 x 99 mm) / 0.7 lbs (0.32 kg) max.

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