

WildCAT PTT

Rugged, Remote, Reliable Radios.

The World's Most Popular Line of ARGOS Transmitters

Features

- User Programmable
- Two OEM Radio Choices
- Low-Power Design
- Miniature Form
- Data-Multiplexing

The WildCAT PTT represents a new generation of ARGOS transmitter. It is small, extremely battery efficient and fully user configurable. As with its predecessor, the SmartCAT PTT, WildCAT offers the user a PTT that provides quality ARGOS data and location positioning through the selection of high quality Temperature Compensated Crystal Oscillators (TCXO). WildCAT is also easily matched to a variety of antenna configurations and provides rugged design for demanding environmental applications. WildCAT is available as a fully user programmable and fully functional ARGOS PTT with a five-volt digital controller or as a miniature OEM RF board ideal for biological or any other low power applications.

Seimac offers ARGOS application developers direct simple support as well as full application engineering consulting services on a fee-for-service basis.

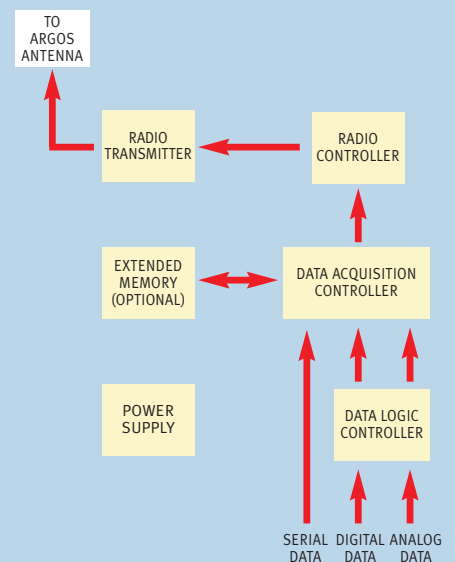
Features

- Fully user programmable including direct sensor control
- Certified to operation at -40°C
- Serial Data Single ID or Multiple ID Data Multiplexing protocol
- Crystal controlled Real-Time Clock
- 8 bit, 8 channel A to D converter with sample and hold (4 channels default, 8 available)
- Rugged extruded aluminum enclosure
- Integrated circuit based design helps to provide frequency stability with no adjustments required
- High quality TCXO for frequency stability over temperature range
- Optional Extended Memory/GPS Interface board
- Certified "Class A" ARGOS transmitter



The WildCAT PTT can be thought of as consisting of 4 basic blocks with 1 optional block as shown in the diagram at right.

The Radio, Data Acquisition and the Data Logic Controllers each have a number of User Programmable Parameters that can be set using the WildCAT User Interface Software. These Parameters control the overall function of the WildCAT and can be used to customize the operation for your particular application.



Seimac

A Chelton Group Company



Rugged, Remote, Reliable Radios.

Seimac has been in business for over 25 years, providing radio and data acquisition products for global customers in the research, military, search and rescue, and oil and gas industries. The company designs, manufactures and markets a variety of products including Cospas-Sarsat Beacons, GOES satellite transmitters, Spread Spectrum Radio Modems, Novatech VHF radio and optical beacons and a range of miniaturized ARGOS satellite radio transmitters that are used in tracking objects and animals in marine and terrestrial applications. The company's operations are based in Halifax, Nova Scotia, with sales offices and warehouses throughout the U.S.

For more information about Seimac and our Radio products, please call:

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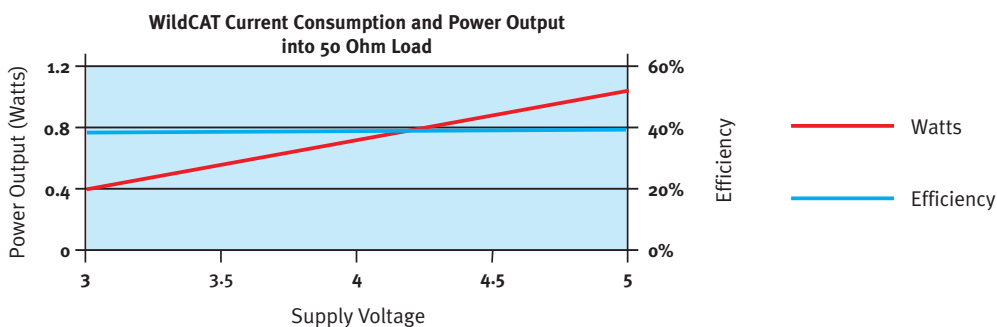
www.seimac.com



*Seimac is a member of the Chelton Group of Companies,
a global supplier of radio and avionics equipment.*

WildCAT OEM RF Board

- Dimensions: 5.1cm by 2.5 cm by 0.6 cm (2" by 1" by 0.25")
- Mass: 7 grams unpotted
- Designed to produce 1 watt RF output with a 5 volt supply but will operate with 40% efficiency down to .5 watt with a 3.6 volt supply and .35 watt with a 3.0 volt supply. Absolute maximum supply voltage is 6 volts. RF output is delivered to a coaxial connector with a nominal 50 ohm load
- Frequency and modulation preset at factory – no adjustments required
- Control and modulation inputs are controlled by open collectors. Jumpers are provided on the board to emulate all popular ARGOS OEM RF boards
- Operating temperatures range is -40°C to +70°C
- Designed to allow casting in plastics/epoxy for deep dive marine applications



WildCAT PTT Specifications

Functionality		Fully compliant with ARGOS PTT operating specifications
Base Function		User ID, Transmit Repetition Rate, Transmit Windowing based on data acquired and/or on timers
User Programmable Functions		Supports up to 4 ID's and 128 Byte message in a single SmartCAT (up to 10 ID's and 1280 Bytes with Extended memory Option)
ID Multiplexing		Analog, Digital or Serial Data
Data Acquisition		
Physical		
Dimensions		7cm (2.8") w x 2.9cm (1.2") h x 5.9cm (2.3")l (inc. enclosure)
Weight		110 grams (3.9 oz)
Environmental		
Temperature Operating		-40°C to +50°C
Temperature Storage		-55°C to +80°C
Relative Humidity		95% non-condensing
Shock		100g, 11 nSec half sine wave shock, three shocks on each of the three primary axes
Vibration		1 hour vibration on each of the three primary axes with random vibrations
Power Supply		
Voltage Range		5.5 to 20 volts
Current Drain		
Sleep		55uA typical
Data Acquisition		10mA typical
Transmit		600mA typical
RF		
Output Power		1.1 Watts
Antenna Output Impedance		50 Ohms
Modulation Type		Manchester encoded phase modulated
Modulation Depth		1.1 radians peak
Interface		
Serial		
Baud rate		1200,2400,4800,9600 (user selectable)
Bits		8 bits
Parity		None
Stop bits		1
Handshaking		Hardware – RTS,CTS or software controlled
Digital		
Number of Inputs		4 default, optionally 8
Equivalent Input Circuit		1 CMOS gate load (each input)
Control lines		1 (used to control power to external sensors)
Analog		
Number of Inputs		4 default, optionally 8
Resolution		8 bits
Voltage range		0-5 Volts
Input Leakage Current		<400nA
Extended Memory Option		
Mechanical		Installed within standard WildCAT enclosure
Configuration		1 MB of Flash Memory, up to 32 kB of RAM, up to 32 kB of ROM
ID Multiplexing		Extends multiple IDs to 10 with messages of up to 1280 Bytes

