

### Overview RCATS 11 Channel R/C Aircraft Telemetry System

**REAL TIME Data Display** and Measurement on a **Virtual Instrument Panel**. With RCATS, you are able to monitor your aircraft's flight data when it is vital, while it happens. RCATS elminates the guesswork of how your aircraft performed.

Post flight analysis is possible with our **Data Recording** capability. Flight measurements are stored at the rate of 8 times per second on your laptop or PC's disk drive. Future support of PDA devices planned.

The **900 MHz Spread Spectrum**, **Frequency Hopping RF Data Link** provides robust transfer of data from the RCATS processor to the RCATS receiver.

A very **lightweight and compact design** allows for a wide variety of applications. RCATS is suitable for use in Sport, Racing, Jet, Helicopter, UAV aircraft and much more.

Components, such as our high-quality **Stainless steel pitot tube** are included. Sensor types can be used to measure various temperatures, including Cylinder Head Temperature, and Exhaust Gas Temperature. No other unit in its class offers as broad a range of measurement.



# **Features**

#### SENSORS

- Airspeed (IAS) 10-290mph
- Altitude (~8ft resolution)
- RPM (500 39,680 RPM)
- Temperature (2 measurements)
- Ambient temperature
- Voltage measurement (0-30V)
- Accelerometer (+/- 50G's)
- Current
- Two open expansion ports

### SOFTWARE

- Live display
- Data recording
- Selectable VNE & Stall alarms
- Rate of Climb



## **Eliminate Guesswork**

The included virtual instrument panel shows complex data on an easy to use display. Incoming telemetry data is automatically saved to the Laptop or PC's hard disk. Micrsoft Excel<sup>™</sup> or similar plotting programs can be used to process the data after landing.

In addition to peak value and statistics available on screen, histograms of select sensors are shown for visualization of trends in data during flight. Audible VNE and Stall warning alarms are selectable on-screen.



# **Technical Details**

Measurement	Specification	Resolution
Voltage	0 to 30V	~30mV
RPM	500 - 39,680 RPM	~39 RPM
Indicated Airspeed (IAS)	10 - 290 MPH	~ 0.5 MPH*
Altitude	0 - 30,000 ft	~ 8ft
Temperature 1 & 2	32 - 1875 <sup>o</sup> F	0.5 °F
Ambient Temperature	-102 - 302 °F	0.5 °F
Acceleration (G's)	+/- 50 G	~1/8 G
Current	+/- 25A	~70mA
I/O 1 & 2	0 - 5V	5mV

\* > 25mph

On board unit weight: ~ 5 ounces (not including battery) Processor size: 3.1825" (L) x 1.625" (W) x .75" (H) Transmitter size: 3" x 1.75" x 0.5" Reciever size: 5.125" x 2.5" x 1" (not including antenna) Current draw: @ 12V supply ~ 250mA Transmitter operating frequency: 902-928MHz (spread spectrum, frequency hopping) 2.4 GHz option available

Specifications subject to change at any time without notice.

#### Ground Station Requirements:

PC or Laptop with the following: Windows 95 or newer edition 500 MHz or higher processor 50 MB free hard disk space 256 MB of RAM CD-ROM drive 9-pin serial port

Receiver power: 9 Volt battery

Airborne Requirements: 12 Volt battery

Mailing Address:

#### **RCAT Systems**

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