

# The Phoenix Model ~ \$2,150

## The World's First Solar Powered Globalstar Tag for Birds



- ▶ Solar Powered For Long Operational Life
- ▶ Internal 56-Channel GPS Engine; Uplink via Globalstar Satellite System
  - Heading, Altitude, and Speed Recorded With Each GPS Fix
- ▶ Truly Real-Time Data From Field To Web
- ▶ Accelerometer Readings in 1, 5, or 10 Hz Bursts
- ▶ Field Downloadable & Reprogramable Without Recapture Via UHF Link
- ▶ Temperature, Humidity, Barometric Pressure, Magnetometer, Gyroscope, and Accelerometer included



### LOGGING SPECIFICATIONS

GPS fixes per day:	1 to 48 based on solar charging conditions
Memory:	8-Megabit Flash
Storage:	up to 90,000 samples

### UPLINK TRANSMIT SPECIFICATIONS

Frequency:	1611.25 MHz (Channel A) 1616.25 MHz (Channel C)
Frequency Select:	Automatic (from GPS location)
Power:	18 dBm, ±2 dB
Antenna:	Dual Feed Patch

### GPS RECEIVER SPECIFICATIONS

Receiver Type:	56-Channel, u-Blox 7 engine
Datum:	WGS84
Receiver Accuracy:	2.5 m CEP
Antenna:	12 mm square patch

### GENERAL SPECIFICATIONS

Dimensions:	1.60" W x 4.73" L x 1.26" H
Weight:	60 grams nominal
Material:	glass-filled nylon
Battery:	800 mA-h High Discharge Li-Po
Operating Temperature:	-10°C to +50°C

Built-In Solar Cell & Charging Circuit • No External Antenna  
Rechargeable Li-Polymer Battery • Nitrogen Filled Enclosure





Anterior End



Posterior End



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### LAPPET-FACED VULTURES

These are large, old world vultures indigenous mainly to Africa. Like many old world vultures, they have been in decline since the early 1990s. In this study, conducted by Dr. Evan Buechley, two vultures were fitted with our Phoenix tags in Ethiopia to track and monitor their movements in the region in order to learn about their natural history and ranging behavior. This kind of basic ecological information is crucial to the management and conservation of this species, and (for that matter) of all old world vultures.



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### ALBATROSS

These are long distance fliers that rarely come to land, the notable exception being to breed and to raise young. In this study, conducted by Drs. Ross Wanless, Cristina Hagen, and Andrew de Blocq, individual Tristan Albatross were fitted with our Phoenix tags to monitor their foraging and migratory movements in the Indian and South Atlantic Oceans off the Southern tip of Africa. The data show extremely long distance movements of thousands of kilometers.

