### HV2-SM / HV2-M / HV1-L

# **ANIMAL**TRACKING

## GPS SATELLITE COLLAR

WE DESIGN AND MANUFACTURE GPS SATELLITE COLLARS SUITABLE FOR WILD ANIMALS, PESTS AND LIVESTOCK.
THESE COLLARS OPERATE BY SENDING GPS DATA TO A COMMUNICATIONS SATELLITE AND BACK TO OUR CENTRAL DATABASE VIA THE GLOBAL IRIDIUM NETWORK.





#### **ABOUT US**

EcoKnowledge is an ecological consultancy based in South Australia, with extensive experience in wildlife and land system monitoring, in particular Decision Support Systems, spatial and ecological models, pest monitoring, wildlife aerial surveys, vegetation surveys and animal trapping. EcoKnowledge also specialises in the manufacture of robust field tracking equipment and hosts an innovative online satellite tracking site.

We are a small company with over 25 years experience in using and building telemetry equipment. Our expertise, knowledge of the industry and personalised service allows us to address any client needs, and we are able to provide specialised advice for customised solutions, for research, management and consultancy applications.

All of our products are designed with an emphasis on durability, practicality and longevity. We conduct rigorous workshop and field testing, and our own field trials.

EcoKnowledge are a Value Added Reseller (VAR) for Pivotel Australia. This allows us to provide a range of data supply options, packages and services.

#### **GPS SATELLITE COLLARS**

Based on our experience in animal tracking, we understand the requirement to vary the frequency and interval between location fixes. Our GPS satellite collar range gives the user the flexibility to change transmission settings via a secure personal login on the Animal Tracking website. Our web interface has fully customisable data fields, which allows the user to map animal positions and movements as well as output statistics in a variety of formats. All location data are stored on our server for the life of the collar, and can be downloaded as a database file at any time. Movement statistics relating to the distance travelled and average speed are available at intervals of days, weeks, years or across the total operational timeframe of the collar. Users can obtain the latest data within 30 minutes of any position fix.

#### **FEATURES**

We are very conscious of animal welfare, and have designed our collars to ensure minimal interference to an animal's normal behaviour. Our own field experience has given us the knowledge to ensure our collars are suitable for even the smallest and most delicate of species. Whilst collar components are selected with the animal's comfort as a priority, our collars are robust, built to withstand high impact environments and are made from either epoxy encapsulated acrylic or high temperature molecular bonded polyurethane. Electronics have an operating temperature of -30°C to +85°C dependent on battery.

Our leading-edge technology includes ultra-low power consumption for collecting and transmitting location data, which helps maximise battery life. However, we provide the option of storing up to 24 positions, to be sent as a batch in a single transmission to further prolong battery life.

# **ECO**KNOWLEDGE

ABN 46 133 654 896 130 Franklin Street Adelaide SA 5000 Tel +61 8 8410 7717 Fax +61 8 8388 5794 www.ecoknowledge.com.au www.animaltracking.com.au



	HV2-SM (SMALL/MEDIUM SATELLITE COLLAR)	HV2-M (MEDIUM SATELLITE COLLAR)	HV1-L (LARGE SATELLITE COLLAR)
DATA TYPE	Iridium, VHF		
APPLICATIONS (BODY WEIGHT)	>11kg	>20kg	>28kg
WEIGHT	400g – 650g (Dependant on strap, mould and price)	700g	>1000g
STRAPPING	38 mm strap Leather, webbing Denim fuse release or solenoid release available (timed and/or website controlled). (NOTE: Solenoid release is an additional weight and price).		100mm strap Webbing, vinyl Denim fuse release available
HOUSING SPECIFICATIONS	Polyurethane and/or epoxy and acrylic, custom colour, high UV rating		Polyurethane, custom colour, high UV rating
SCHEDULING OPTIONS	All web controlled; 20mins, 1hr, 2hrs, 6hrs, 12hrs, 24hrs, 48hrs. 4-24 records per transmission		
INTERCHANGEABLE BATTERY	Yes, optional		
BATTERY LIFE			
(1 POSITION/TRANSMISSION)	(Without additional sensors)	(Without additional sensors) (Can be limited by battery shelf life)	(Without additional sensors)
2 POSITIONS/DAY	~280 days	~4 years	~6 years
6 POSITIONS/DAY	~100 days	~2 years	~3 years
24 POSITIONS/DAY	~25 days	~200 days	~1 year
BATTERY LIFE			
(24 POSITIONS/TRANSMISSION)	(Without additional sensors)	(Without additional sensors) (Can be limited by battery shelf life)	(Without additional sensors)
2 POSITIONS/DAY	~5 years	>8 years	>8 years
6 POSITIONS/DAY	~3 years	>8 years	>8 years
24 POSITIONS/DAY	~1 year	~4 years	>8 years
VHF BATTERY LIFE	18 months	3 years	6 years
BI-DIRECTIONAL COMMUNICATIONS	Ability for client to change frequency of GPS locations and number of positions held, through website		
OPTIONAL FEATURES	Activity sensor, mortality sensor, temperature sensor, 3D orientation. (Other various external sensors can be fitted to HV1-L model).		
ALERTS	Animal ceasing movement, estimated positions remaining		
VHF BEACON FREQUENCY	150-152khz		
SOFTWARE INTERFACE	Web login for Windows XP or later		
DATA FORM	Device, date, time, latitude, longitude, easting, northing, 3D fix		



ABN 46 133 654 896 130 Franklin Street Adelaide SA 5000 Tel +61 8 8410 7717 Fax +61 8 8388 5794 www.ecoknowledge.com.au www.animaltracking.com.au