



FastGPS Argos Series

Technology:  Satellite

Product:  Tag

Kemp's ridley sea turtle (*Lepidochelys kempii*) © National Park Service 2016



The FastGPS F6 series are Argos linked FastGPS tags for a wide range of applications.

FastGPS is fast acquisition GPS technology designed for marine animals which only surface briefly. Raw locations and basic dive data are then relayed back to the researcher via the Argos satellite system.

Unique FastGPS technology enables a snapshot of GPS signals to be taken in a fraction of a second compared to conventional GPS which can take tens of seconds. FastGPS raw data is automatically post-processed and can be viewed and downloaded via a secure web portal.

Options

- DIVE data includes max. depth, dive time and TAD (Time At Depth) index.
 - Flexible scheduling for Argos transmit interval and FastGPS sample rates.
- Haul-out mode
- Optional Polyurethane armour for impact absorption and abrasion protection

Features:



Temperature



Depth



Position



Wet/dry sensor



Haul-out mode



Duty cycling

Accurate positions transmitted via Argos:

Near GPS quality accuracy captured in a fraction of a second

Data management:

Location data automatically processed and accessed via the Lotek Argos Web Service

Rugged packaging:

Rugged hydrodynamic package designs for depths up to 2000m.

Product Applications

Models available for shark, pinniped and marine turtle applications where there is little or no chance of recovering the tag to retrieve the data.

| Model | Weight (g) | | Estimated Life ^[2] (days) | | Size (LxWxH) (mm) | Depth (m) | DIVE Sensor | Enhanced Memory | Heavy Duty |
|----------|------------|-------------------------|--------------------------------------|------|----------------------|--------------|----------------|--------------------|---------------|
| | in air | in water ^[1] | Standard | DIVE | | | | | |
| F6G 173A | 51 | <10.4 | 111 | 152 | 105 x 21 x 18 | 200 | Yes | Yes | No |
| F6F 176D | 65 | -1.6 | 157 | 216 | 96 x 19 x 80 | 1000 | No | No | No |
| F6G 276E | 140 | 47.4 | 308 | 419 | 100 x 44 x 31 | 1000 | Yes | No | No |
| F6G 276F | 148 | 46.6 | 308 | 419 | 101 x 44 x 32 | 2000 | Yes | No | Yes |
| F6G 376B | 240 | 93.6 | 463 | 629 | 115 x 64 x 44 | 2000 | Yes | No | Yes |
| F6G 676B | 520 | 112.5 | 926 | 1259 | 164 x 75 x 62 | 2000 | Yes | No | Yes |

1. Assuming the density of seawater is 1024 kg/m³

2. Estimated life calculated with hourly FastGPS locations and a daily limit of 200 Argos transmissions.

Features and specifications subject to change without notice.



Technical specifications:

Argos transmit power: 500mW

Operating temperature range: - 20 °C to 50 °C

Standard sensors:

Wet/dry sensor

Temperature sensor range: -40 °C to 60 °C

Temperature sensor accuracy: ±0.2 °C

Temperature sensor resolution: better than 0.05 °C

DIVE sensors:

Calibrated sensor range: -5 °C to 40 °C

Depth sensor ranges: 200m, 500m, 2000m

Depth sensor accuracy: ±1% of Full Scale

Depth sensor resolution: ~0.025% of Full Scale

Warranty

FastGPS Argos tags are warrantied to be free of defects in materials and workmanship under Normal Use for a duration of 80% of Estimated Life to a Maximum of 12 months. For Warranty terms and conditions, please review our [Warranty Statement](#).