



## New Product

# KiwiSat® K4F Series

**Technology:**  **Satellite**

**Product:**  **Tag**

Gray reef shark (*Carcharhinus amblyrhynchos*)



## Introducing the K4F 149D Argos transmitter

Lotek KiwiSat® K4F 149D is a lightweight marine Argos transmitter for attachment to the dorsal fin of a surfacing shark.

K4F 149D is carefully designed with a compact shape, minimal frontal area and can operate to a pressure of 1000dBar.

The tag is available with a choice of attachment points to better suit different shark morphometry.

### Options

- Sat-Data options include:
  - DepthTemp: Depth + temperature time series, or
  - Dive:
    - Dive Summary: % time wet, Daily maximum depth
    - Individual dive: Dive duration, Maximum depth, Time At Depth index
- Sensors: Pressure, External temperature and Wet/dry
- Anti-biofouling coating
- Attachment hardware

### Features:



Depth



Temperature



Position



Wet/dry sensor



Duty cycling

### Rugged Reliability:

Designed for depths of 1000m.

### Data Management:

Argos data automatically stored in a secure cloud database and accessed via the Lotek Cloud Service.

## Product Applications

Ideal for shark species that frequent the surface such that their dorsal fin is exposed to the air. Size is small enough to be applicable to juveniles.



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Model	K4F 149D
Weight in air (g)	27
Weight in saltwater <sup>[1]</sup> (g)	TBD
Size (LxWxH) (mm) <sup>[2]</sup>	80 x 61 x 15
Estimated Life <sup>[3]</sup> (days)	
Standard	275
DIVE	179
Depth/Temp	89
Max Depth <sup>[4]</sup> (m)	1000

1. Assuming the density of seawater is 1024 kg/m<sup>3</sup>.
2. Reflect the maximum dimensions but the volume is significantly less.
3. Estimated life using 200 transmissions per day.
4. Max Depth for sensor model: 300m.

Features and specifications subject to change without notice.

### Transmitter Specifications

Argos transmit power: <200mW

Operating temperature range: - 10 °C to 50 °C

### Standard Sensors

Wet/dry sensor

### Optional Sensors Specifications

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

Temperature sensor accuracy: ±0.2 °C

Temperature sensor resolution: better than 0.05 °C

Depth sensor range: 300m

Depth sensor accuracy: ±1% of Full Scale

Depth sensor resolution: ~0.1% of Full Scale

## Warranty

KiwiSat<sup>®</sup> K4F tags are warranted 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.

The warranty life of the K4F 149D is 220 days based on the above noted scenario. For Warranty terms and conditions, please review our [Warranty Statement](#).

