

Cefas G6A Accelerometer-enabled Data Storage Tag

Product leaflet



G6A / G6A Long Life

- ▶ **pressure and temperature sensors**
- ▶ **3 axis accelerometer $\pm 2g$ or $\pm 8g$**
- ▶ **up to 40MB memory**
- ▶ **logging rates up to 30Hz**
- ▶ **optional dive logging**
- ▶ **10+ years' battery life**

Overview

Our Cefas Data Storage Tags (DST) are a result of over 20 years of DST development and expertise at Cefas. The tags have been developed by our in-house Applied Technology team in close conjunction with the Fisheries Scientists. With this combination of technical expertise and scientific experience the tags are designed to meet the needs of scientists involved with behavioural research.

The tags are market-leading products offering considerable advantages over other tags, both in capability and price. We provide complete customer support from technical sales advice through to application and data interpretation.

Cefas G6A

The Cefas G6A is a new product that includes a 3 axis accelerometer ($\pm 2g$ or $\pm 8g$) in addition to the usual pressure and temperature sensors. This tag also has a larger battery to support the logging of data at up to 30Hz, which offers a combination of longer life and larger memory capacity. The tag is capable of taking up to 40 million readings from its sensors over the life of the battery.

DST users want greater programming flexibility, so a key feature of the G6A is its independent sensor settings. Repeat Logging allows users to configure short bursts of data logging over an extended period of time.

If your research involves studying diving birds and mammals, you will be interested in our Dive Switch and Fast Logging Rate option. The dive switch allows the Fast Logging Rate to be activated when the animal enters the water so that dive profiles can be measured.

- ▶ Fast Logging at rates down to 0.1 seconds
- ▶ Fast Logging Rate activated by entry into water
- ▶ deactivated by removal from water / return to surface
- ▶ operates in fresh water and seawater.

Robustness and reliability of the Cefas tag technology comes as standard. Please see overleaf for a full technical specification.

Contact us

Dr Richard Dowdeswell
Cefas Technology Limited,
Cefas Lowestoft, Pakefield Road,
Lowestoft, Suffolk NR33 0HT, UK

Tel +44 (0) 1502 562244
or +44 (0) 1502 524511
Fax +44 (0) 1502 524569
Email richard.dowdeswell@cefastechnology.co.uk

	Cefas G6A Stainless Steel 16MB / 40MB	Cefas G6A Epoxy 16MB / 40MB
Max Dimensions - Length x Width x Height	50mm x 35mm x 17mm (Base thickness 1.2mm)	40mm x 28mm x 16.3mm
Tag Body Diameter	32mm	N/A
Weight in Air	18.3g	7.3g
Weight in Seawater	4.6g	2.3g
Depth Sensors ¹	100, 200, 500, 1000, 2000m	
Absolute Max Depth	3000m	
Operating Temperature	-20°C to 60°C	
Absolute Temp Range	-30°C to 60°C	
Maximum number of readings at 8 bit resolution	41.88M	
Battery Life ²	10+ years	
Multiple 15 day memory fill	14 / 5	7 / 3
Rate of logging	Up to 1 hour at 1 second resolution, Up to 18 hours at 1 minute resolution	
Accelerometer range	±2g or ±8g	
Accelerometer resolution	18mg or 72mg	
Optional Dive Logging / Water Switch	30Hz; 25Hz; 20Hz; 15Hz; 10Hz; 5Hz; 4Hz; 2Hz	
Accelerometer rate	30Hz; 25Hz; 20Hz; 15Hz; 10Hz; 5Hz; 4Hz; 2Hz	

Additional specifications

Physical parameters	
Casing	Stainless Steel Case / Epoxy Resin / Urethane
Real time clock	Epoxy Resin / Urethane
Temperature Compensated	Yes, 2°C to 34°C
Memory	
Type Flash	40MB
Time series data points ⁵	
at 8 bit resolution	41.88M
at 10 bit resolution	33.504M
at 12 bit resolution	27.92M
Delayed Start of Logging	Yes
Data retention	20 years
Summary Log	Daily record of max / min parameters
Communications rate	115.2k baud
Other	
Battery Chemistry	Lithium Manganese Dioxide
Communication	Direct Contact
Depth sensing	
Accuracy	±1% Full Scale at 12 bit ADC
Resolution	100m sensor Better than 4cm, 200m sensor Better than 8cm, 500m sensor Better than 15cm, 1000m sensor Better than 30cm, 2000m sensor Better than 60cm
Temperature Compensated ³	Yes, 2°C to 34°C
Maximum depth before pressure sensor failure	1.5 X Full Scale
Temperature Sensing	
Accuracy	±0.1°C at 12 bit ADC Range ³ 2°C to 34°C
Resolution	0.03125°C
Response Time ⁴	15 seconds / 60 seconds
Required Peripherals	
Reader	Connected via serial port or USB serial adaptor
Data Output	CSV format (MS Excel etc.)
Software	G5 Host – Windows OS