

# Cefas G5 New generation Data Storage Tag

Product leaflet



1



2



3

## The development of the Cefas G5

The Cefas G5 Data Storage Tag (DST) is the result of over twenty years of DST development and expertise at Cefas. The tag has been developed by our in-house Applied Technology team, in close conjunction with our Fisheries Scientists. With this combination of technical expertise and scientific experience the G5 is designed to meet the needs of scientists involved with fish behaviour research.

The G5 is a market leading product 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. Our product portfolio includes tags, readers and software, plus all the technical, scientific and sales support you may need.

## Product benefits: maximise your research potential

The G5 offers significant benefits over other DST's in a number of ways. The tag is much smaller and lighter than previous generations of DST, yet has a much higher memory. The weight reduction helps to ensure that tagged fish or animals behave as naturally as possible. This permits tagging studies to be carried out on a wider range of species, potentially opening up new fields of research.

The tag is capable of taking one million readings over the life of the battery, giving far more accuracy and information than other tags. DST users want greater programming flexibility, so a key feature of the G5 is its independent pressure and temperature settings. It's also easy to use and set up so you can take advantage of the built-in features.

In addition, the robustness and reliability of Cefas tag technology comes as standard. A full technical specification is included overleaf.

## Features of the Cefas G5

- Much smaller and lighter than previous tags (weighs 1g in water)
- Increased memory and resolution (1 million readings)
- Flexible programming: independent pressure and temperature settings
- Easy to use programming and set-up
- Robust tags, based on 20 years of design and application expertise
- Developed by Cefas
- High quality information
- High reliability, low cost tags
- Reliable delivery from proven production processes
- Discounts on larger orders
- Comprehensive customer support: technical, scientific and sales

1 Cefas G5 DST size comparison with a one Euro coin.

2 Tag attached to fish.

3 A 3 kg bass with tag attached.

## Contact us

Mr. Stephen Millward  
Cefas Technology Limited,  
Cefas Lowestoft, Pakefield Road  
Lowestoft, Suffolk NR33 0HT, UK

**Tel** +44 (0) 1502 527760  
**or** +44 (0) 7786 171159  
**Fax** +44 (0) 1502 527769  
**Email** info@cefastechnology.co.uk

## About us

CTL is a wholly owned subsidiary of Cefas specialising in the application of Cefas technology to specific customer needs in a cost effective and focussed manner. CTL systems are developed by teams that are experienced in fisheries and environmental management and of working closely with clients to ensure that their needs are fully met. (www.cefastechnology.co.uk)

## Cefas G5

### Physical Parameters

Diameter or width	8 mm
Length	31 mm
Weight in Air	2.7 g
Weight in Water	1.0 g
Casing	Polystyrene / Urethane
Operating Temperature	-2 to 40° C
Absolute Temp Range	-10 to 70° C
Absolute Max Depth	3000 m

### Real Time Clock

Temperature Compensated	Yes
Set at Factory	User settable

### Memory

Type	8MBit Flash
Time series data points at 8bit resolution	1.04M readings
at 10 bit resolution	832k readings
at 12 bit resolution	693k readings
Time series data	No telescoping
Time Series Interval	1sec to 59 min 59 sec or 1 min to 18 hr
Delayed Start of Logging	yes
Day Log	Summary log (9 bytes/day)

### Other

Battery Chemistry	Silver
Logging (Battery) Life <sup>1</sup>	10 months
Data retention	10 yrs
Communications rate	115.2 k baud
Communication	Gold Contacts

### Depth Sensing

Full Scale (F.S.) <sup>2</sup>	100, 200, 500, 2000m
Accuracy	+/-0.5% FS at 12bit ADC
Resolution 100m sensor	Better than 4 cm
Resolution 200m sensor	Better than 8 cm
Resolution 500m sensor	Better than 15 cm
Resolution 2000m sensor	Better than 60 cm
Temperature Compensated <sup>3</sup>	Yes, 2 to 34° C
Max Depth <sup>5</sup>	1.5 X FS

### Temp Sensing

Accuracy	+/-0.1°C at 12 bit ADC
Range <sup>3</sup>	2 to 34° C
Resolution	0.03125° C
Response Time <sup>4</sup>	28 sec

### Other options

Saltwater switch	Optional
Radio Beacon	Optional
Pop-off	Optional
Alternative sensor channels	Optional
Attachment points	drilled hole in end

### Required Peripherals

Reader	G5 reader
Windows Interface	G5 Host
Data Output	CSV format

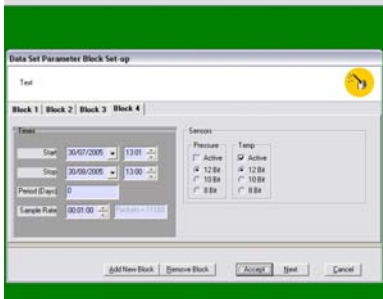
*Note 1: Under normal operating conditions and single deployment*

*Note 2: Optional depth sensing ranges available*

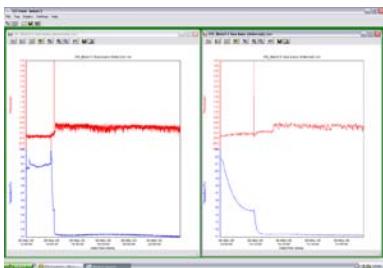
*Note 3: Accuracy and Resolution degrades outside this range.*

*Note 4: Time to reach 66% of step from 5 to 30°*

*Note 5: Max depth before pressure sensor failure*



4



5

4 Screen grab of Windows showing tag software in use.

5 Tag output chart.