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Technology
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2. How does auto geotagging work?

To geotag an object; a picture or a video for example, you need to know where you are. And the vast majority of people want to know where they are effortlessly, seamlessly and automatically.

There are various technology approaches but the most accurate system is GPS. Historically, GPS implementations were developed for navigation systems which work well for “real-time” or “streaming” applications like navigation, although these methods require large batteries and patient consumers Furthermore integrating streaming solutions into cameras has proved difficult from a User Interface and Consumer Experience perspective.

Our automatic geotagging technology solves these problems. A fragment of RAW GPS RF data is captured in 0.2 seconds and then stored alongside the digital image and the processing is performed later on a PC. Because we separate the GPS capture from the GPS processing, our technology maintains the traditional “instamatic” user experience we are all used to and then pulls consumers to experience a far more interesting way to search and share photographs later.

Instant Capture

Geotate automatic geotagging technology uses a 0.2 second GPS acquisition signal to capture a RAW GPS signal as part of the usual photo moment, ensuring no delays for the user.

In comparison, a traditional streaming GPS device will take a few seconds to find the satellite signals, around thirty seconds to download satellite orbit information, and a few more seconds to calculate the user's position.

Traditional GPS: *"Oops - missed it!"*

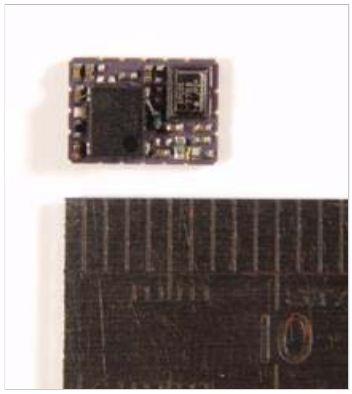
Auto geotagging: *"Perfect timing."*

Low power consumption

Because Geotate technology only requires the frontend to be active for 0.2s per capture, power usage is minimal. For our reference design, each capture consumes just 10mj. The low power demands per capture means that a logger could run for months or years, and the impact on integrated cameras is negligible.

Simple hardware integration

Geotate have worked with **Rakon** to develop a small GPS frontend module which can easily be integrated into a camera or accessory device. The module is 7mmx5mm, and includes the GPS radio receiver, filtering, and oscillator TCXO. This is combined (on device) with an antenna and controller logic to provide a complete GPS solution.



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How can I find out more?

Geotate is always interested to hear from manufacturers looking to implement our Capture and Process technology.
Please contact us at **info@geotate.com**

Find out more by reading the **Capture and Process White Paper**

Meet us at our office, or an upcoming event

Order an evaluation kit to start experimenting with the technology

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