

February 5, 2019

RE: H-2221 GOES Transmitter Interruptions

Dear Valued Customers,

Some of you experienced an interruption in GOES-facilitated transmission of data in October 2018, and are familiar with the training materials, videos, webinars, and firmware update instructions we provided in response. Those materials are still available at <u>www.ysi.com/goes-support</u>. At that website you will also find a customer-facing webinar from December 20th (called "Solutions Webinar"), wherein we reviewed the root cause of the interruption, known as a "GPS Clock Rollover." The Rollover event that affected the specific GPS transceivers used in our H-2221 GOES Radios was the first of its kind to widely impact our industry.

Since that time, the industry has become more aware that similar events are possible, and can impact a number of other devices. Manufacturers of devices that use GPS technologies, including us, are trying to respond proactively. It should be noted that GPS in our non-radio devices should not be affected by Rollover events. For example, our EXO and ProDSS handhelds that contain GPS will not be affected.

However, government agencies are warning satellite radio users that in April 2019 another GPS Clock Rollover event is imminent, and that GOES transmissions might be affected. Naturally, customers have asked if we anticipate that YSI H-522+ data loggers, which have the H-2221 GOES radios, will be affected by the April event.

The short answer to this question is no, but there may be one exception. The initial answer is no because the April Rollover event will affect a specific GPS transceiver chipset that is not in GOES radios that have been manufactured by YSI. The exception, however, might be pre-2009 models that were manufactured using a GOES radio built by Signal Engineering. We do not have the manufacturing specifications for those radios, nor do we have the ability to investigate the internal electronics, in keeping with terms and conditions that were agreed to at the time we used those radios.



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Tel +1.877.726.0975 (US) Fax +1.937.767.9353 info@ysi.com YSI.com If you are not sure whether you have a Signal Engineering GOES radio in your H-522+ data logger, the videos and instructions at <u>www.ysi.com/goes-support</u> will help you to figure that out. The first thing to look at is the label on the data logger. If the label says "GOES Radio With Integral Data Logger" rather than "H-2221-V2 Transmitter With Integral Data Logger", there is a possibility you have a model old enough to have the Signal Engineering radio.

The second step is to look inside the logger. The videos posted at <u>www.ysi.com/goes-support</u> and the downloadable instructions at the site describe how to open up the data logger to get to the radio. You will see in the images that the YSI-manufactured radio is gray in color. By contrast, the older Signal Engineering radios are gold and will say Signal Engineering on them.

If you learn that you have one of these radios our advice is to contact Signal Engineering, or to look for updates they may provide about these radios and their possible vulnerability to the April rollover event.

I once again want to express my gratitude to our customers for their consideration and understanding while we resolved this issue last year. As I said then, and will always say, your needs are our top priority and we make every possible effort to address them.

Thank you,

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