

The Axiom™ H2 Datalogger / DCP

No laptop, no programming required.

The Axiom was the first to offer an integrated touchscreen to provide a simple, graphical interface to all logged data, scripts, configurations, sensors and diagnosis tools. Our strength is ruggedness, so it's still the only waterproof, industrial-grade, daylight readable integrated touch screen. It eliminates the need for field laptops and cables, and lets you do anything with the datalogger in any weather condition.



Leave the laptop at the office.

- No more wind and rain damage, low battery or “where do I put the laptop?” hassles.
- No complex software to install, configure, maintain or learn.
- No interface cables to mess with.



Built like a tank.

If you can't tell by looking at it, go ahead and pick it up, or submerge it in water. This datalogger is built to last. It delivers extremely low total cost of ownership.



Real simple.

Clever design in both hardware and the integrated software makes life easier for everyone who interacts with the datalogger. So you can focus on the data and not on ensuring you get it.

Reliable Connections.

We pioneered the use of military-style bayonet connectors for attaching external devices to our dataloggers. Why?

- The watertight, corrosion-resistant, positive-locking connection becomes incredibly reliable, eliminating the most probable point of failure.
- The color-coded, single-port design makes connecting sensors and other features during installation and maintenance dead simple and fast.

All FTS sensors include bayonet connectors. They can be added to your current digital or analog sensors and power sources for **full compatibility**.

Simple diagnosis.

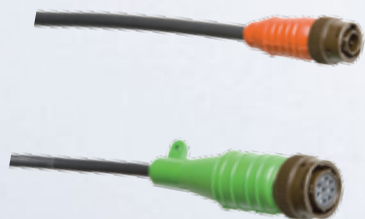
Even though the Axiom offers unprecedented reliability, we know that things can and will go wrong—it's the nature of using electronics outdoors. Our integrated power manager reduces the chance of a problem with the power system—the most common source of problems—and minimizes your time spent troubleshooting.

- An integrated power manager adds an additional layer of intelligence to the Axiom by allowing the datalogger to directly talk to and manage the solar panel and battery. It also eliminates the need to buy and install an external charge regulator, and like everything else inside the watertight housing, it's protected.
- The Axiom is constantly aware of parameters like solar voltage and current, battery voltage and current, battery and internal ambient temperature, and can transmit this information via any telemetry method. This allows the datalogger to provide a complete picture of power conditions for diagnosing power issues remotely, eliminating unnecessary site visits.
- At the site, this information is available as an interactive time-series graph on the integrated touchscreen, making it dead simple to pinpoint when a fault occurred.

Get your data to go.

FTS was the first company to introduce GPS time syncing into GOES communication, and was first to offer HDR GOES data. Our fifth-generation G5 GOES transmitter is extensively field proven as the most reliable of any manufacturer. In fact, FTS GOES technology forms the backbone of the National Climate Reference Station System. It's available as an option integrated into the Axiom datalogger.

- Extremely accurate timekeeping reliably transmits hourly data for up to 28 days without a GPS fix.
- Extremely low power requirements extend operation in situations of low power or interrupted solar panel charging.
- Automatically calculates GOES antenna azimuth and inclination, speeding installation and eliminating errors.
- Supports test transmissions on an alternate test channel with fixed text messages to ensure future data transmission reliability.
- NESDIS ID testing is performed at the factory before each DCP is shipped to further ensure that GOES transmissions will work perfectly.

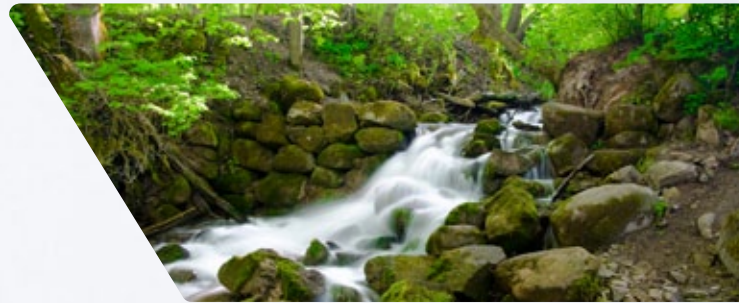




**Extreme environments.
Extreme ruggedness.
Extremely simple.**



Axiom™ H2
Datalogger / DCP



Tough on the outside. Clever on the inside.

Engineered to be rugged, designed to be simple.



Double the SDI ports, double the reliability.

Four independent SDI ports reduce the failure risk by up to 75% compared to dataloggers with just one or even two SDI ports. A sensor failure on one port won't stop the sensors on the three other ports from continuing to record data.

Rapid site visits.

By embedding the datalogger software right into our sixth-generation datalogger, we were able to meet our customers' predominant desire: less time spent doing site visit tasks.

- Electronic site visit reports eliminate manual report writing. All activity during the site visit is recorded, and a full set of quality control documentation is completely automated.
- The Axiom stores an equipment serial number table, which is also included in each site visit report which can be updated easily for analog sensors with a couple clicks, or automatically for digital sensors.
- On-site reconfiguration is a snap—select an alternate configuration from your library using the touchscreen, and you're done.
- Stage offsets are automatically calculated, displayed, and logged. Simply enter an observed staff gage value and the instrumented value is automatically corrected with audit logs of all offset changes.
- Stage offsets can be set using user configurable high-frequency polled measurements, so rapidly changing stage is no problem.

Extreme Ruggedness.

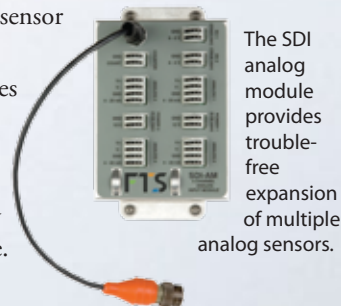
Because reliability is paramount and any downtime means lost data and increased liability, the Axiom is engineered for long-term durability in the harshest environments. You simply can't buy a more rugged datalogger. Reduced total cost of ownership is nice too.

- Three levels of lightning protection. We have 30 years of experience building equipment for the most extreme lightning strike locations, and it's in here.
- The entire unit—the cast aluminum, O-ring sealed case and all ports—is completely impervious to the elements. Even the touchscreen. And not just splashproof: fully watertight.
- Positive-locking, waterproof, color-coded, cadmium-plated, corrosion resistant, military-style bayonet connectors.

Flexibility and expandability.

The Axiom may be today's most state-of-the-art datalogger, but it's also a technology platform for the future. Just like other computer hardware, the Axiom can gain new functions simply by installing new software, ensuring the rugged hardware a long life and low total cost of ownership.

- Install new programs and firmware updates easily via any standard USB flash memory stick.
- A virtually unlimited library of configurations can be stored, uploaded, downloaded and selected via the touchscreen, ideal for large network operators maintaining an inventory of spare equipment.
- Expand by adding up to 62 SDI or analog (with the optional SDI to analog converter module) sensors on each SDI port, while greatly reducing the risk of multiple sensor failure.
- Analog input voltages are completely configurable, providing compatibility with virtually any sensor out there.



The SDI analog module provides trouble-free expansion of multiple analog sensors.

Axiom and autosamplers: a perfect match

When it was introduced in 2009, the Axiom datalogger was the first to introduce flexible, GUI-based, event-driven sampling. The Axiom has the unique ability to intelligently trigger, without the hassle of writing any code, an attached Teledyne ISCO automatic water sampler to get you the optimized samples you want. For instance, when a turbidity event occurs, a series of strategic water samples can be captured until the turbidity

decreases again to normal. This ensures that only event water samples are taken, resulting in better data. This unique capability of the Axiom datalogger powers our SedEvent™ water quality system.



Our SedEvent™ system is the world's first fully integrated event-triggered grab sampling system.

"We have found FTS' products to be vastly superior in every aspect of data collection and equipment maintenance."

Kate Sullivan, PhD
Pacific Lumber Company

About FTS

FTS is in the business of **remote data collection**. We design and manufacture extremely rugged systems, dataloggers, DCPs and sensors for **hydrology and hydromet monitoring**. One of our areas of focus is **continuous instream turbidity and sediment monitoring**.

We've developed the world's first fully integrated turbidity event-triggered grab sampling system that can determine sediment and nutrient loads significantly more accurately than with traditional methods. It provides **the best method of characterizing impairments**, ensuring sound decisions affecting public safety are made and best management practices are implemented and effective.

Our technology is engineered specifically for **harsh environments in remote locations**, so it has to operate continually, reliably, for long periods of time, with minimal maintenance requirements.

We don't just manufacture equipment, we constantly innovate advanced environmental monitoring technology. And because **we understand our customers and their goals**, we produce solutions that have a direct impact on ease-of-use. Our customers have told us that tremendous power and flexibility should never come at the expense of simplicity.

"For me the decision to go with FTS was based on whether buying the integrated SedEvent system was worth the extra cost. It was."

William Ehinger, PhD
Washington State Dept. of Ecology

It simply works. In *any* environment.



1065 Henry Eng Place
Victoria, BC, CANADA V9B 6B2

1123 Fir Ave., Suite C
Blaine, WA 98230

www.ftshydrology.com
1.800.548.4264

