

SolSat 5 Satellite Telemetry

Model 9700 Data Sheet



SolSat 5 Satellite Telemetry Model 9700

SolSat 5 Satellite Telemetry is an advanced telemetry system that leverages Iridium satellite technology to provide global connectivity for your remote water monitoring projects. The SolSat 5 is simple to set up with Solinst dataloggers using an integral, secure Wi-Fi App on your smartphone.

SolSat 5 combines intelligent electronics with builtin sensors, alarm capabilities, and storage for up to 100,000 readings, allowing efficient satellite transmissions and power usage while providing high data integrity.

The SolSat 5 is compact, lightweight, and features a robust weatherproof enclosure. SolSat 5 is deployed anywhere with very little site preparation, saving you costs and time in the field. A built-in solar panel extends the battery life, and you can easily add a second panel.

SolSat 5 Satellite Telemetry connects to one Solinst datalogger. The built-in barometric sensor allows for automatically compensated water level data reported from the field.

Along with water level, temperature, conductivity, and barometric data, battery voltage from the remote SolSat 5 is received with each data report.

Advantages of SolSat 5 Satellite Telemetry

- Global connectivity with Iridium satellite technology
- Cost-effective compared to other satellite telemetry systems
- System set up done wirelessly using your smartphone or laptop
- Compact and weatherproof housing for deployment in any environment and long-term applications
- Secure and convenient data transmission and alarm alerts through TextAnywhere
- Reports barometrically compensated water level data
- Remotely monitor battery level with each data report
- Less need to travel to remote, hard-to-reach, or hazardous locations
- Text and email through satellite provides safety and convenience when working in remote locations

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Features of SolSat 5 Satellite Telemetry

- Connects to your smart device or laptop via Wi-Fi for full user control of system set up
- Data is sent to a secure website portal for management or downloaded from the App
- IP rated housing, ideal for long-term deployment
- Internal barometer for automatic water level compensation
- Built-in ambient temperature sensor for added information
- Accurate real-time clock allows low-power sleep mode between reports
- GPS module provides geo-tagged data
- Built-in solar panel, and convenient connection for battery charging and optional solar panel

How to Use SolSat 5 Satellite Telemetry

SolSat 5 batteries are charged by the built-in solar panel or by using the 2-pin Bulgin power connection. An additional solar panel can be connected to prolong the battery life.

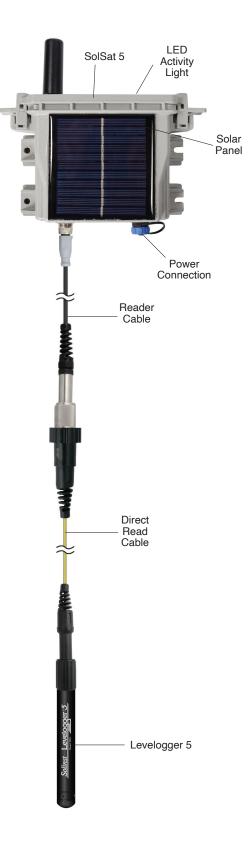
Interfacing with the SolSat 5 is simple and intuitive using the built-in Wi-Fi App on any smart device or laptop. The app allows you to view, schedule and configure your remote monitoring system wirelessly from your browser.

Data is transmitted using the TextAnywhere two-way global satellite messaging service. TextAnywhere also allows you to text or email through the Wi-Fi App, providing convenience and safety when at remote sites.

The SolSat 5 is set up with a data plan based on your needs – sampling rate to collect data from the connected datalogger, and a report rate to send data via satellite transmission. You can also get daily max/min reports. High or low level alarms can be set for the datalogger.

Data logs are sent to a secure website portal for storage, viewing or export; the website can also be used for project and alarm management. You can also download data logs from a SolSat 5 using the Wi-Fi App.

If more detailed data is desired, the Solinst datalogger can be programmed to record independently in its internal memory.



| SolSat 5 Satellite Telemetry Specifications | |
|---|--|
| Communication: | 9603 Iridium SBD Satellite Modem |
| Communication Distance: | Global coverage (*clear view to the sky required for best performance and battery life) |
| Antenna: | High-performance helical (SMA connector) |
| Data File Type: | Sent via SMS, export as .csv or .xle |
| Sampling Interval: | Hourly |
| Reporting Interval: | Daily, every 6 hours, or hourly |
| Schedule Programming: | Wi-Fi App (browser) on your smart device or laptop |
| Power Supply: | 2 x 3.4 Ah LiPo batteries |
| Battery Charging: | USB 5 volts, built-in 2 Watt 325 mAh solar panel, optional additional solar panel |
| Battery Life Estimate: | 2–3 years* (based on hourly samples and one satellite transmission per day) |
| Memory Capacity: | 100,000 readings (wrap-around memory) |
| Operating Temperature: | -20°C to +55°C |
| Weight: | 535 grams (18.9 ounces) |
| Size: | 19.1 cm x 16.4 cm x 6.4 cm (7.5" x 6.5" x 2.5") |
| IP Rating: | IP66 |
| Compatible Dataloggers: | Levelogger 5, Barologger 5, Levelogger 5 Junior, Levelogger 5 LTC, LevelVent 5 |
| Connected dataloggers: | 1 |
| Barometric Compensation: | Internal barometer for automatic barometric compensation of water level data if a Barologger is not being used (not required for vented loggers) |
| Internal Barometer Range: | 30 kPa – 110 kPa |
| Internal Barometer Accuracy: | ±0.1 kPa (1 cm) |
| Warranty: | 1 Year |

