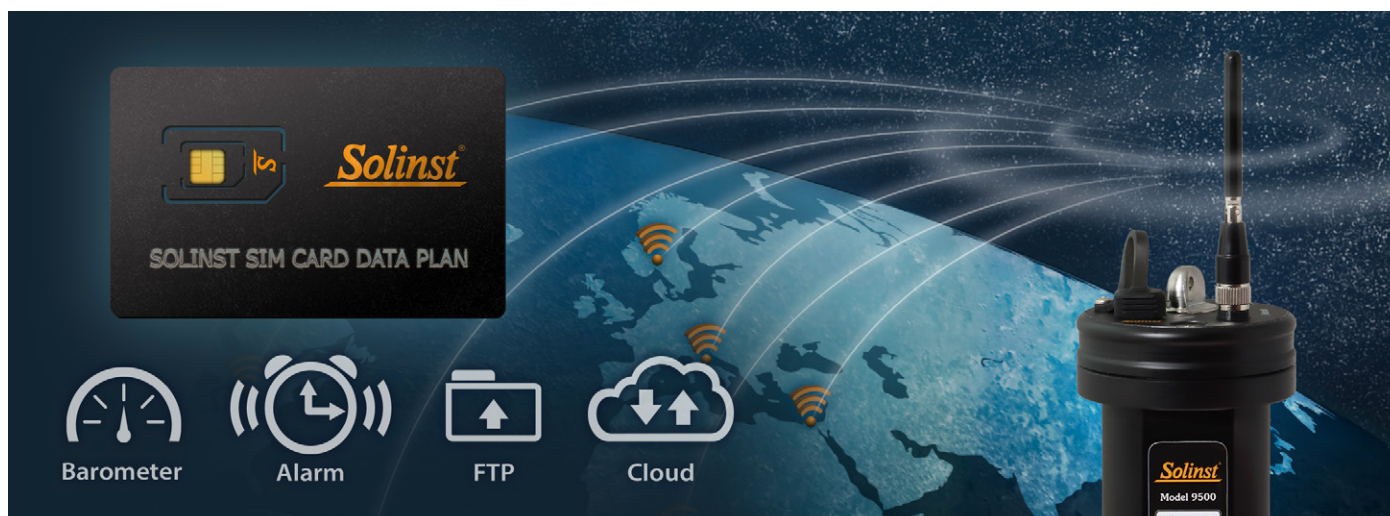




LevelSender Telemetry

Model 9500



The LevelSender is a simple, low-cost system designed to wirelessly send data from Solinst dataloggers in the field via cellular communication to multiple locations of your choice for flexible remote access.

Solinst provides the option of a pre-programmed LevelSender with a 4G LTE-M SIM setup. The Solinst SIM card scans multiple networks and connects to the strongest signal. Low-cost, data-only plans are billed directly through Solinst for convenience.

LevelSender remote stations are compact, allowing discreet installation inside a 2" diameter monitoring well or other housing. Power is supplied through 3 x AA 1.5V replaceable lithium batteries, or an external power source via USB.

Each LevelSender device has a single port to connect one datalogger. An optional splitter provides connections for two dataloggers. A built-in barometer allows the option of reporting barometrically compensated Levellogger readings.

Along with water level, temperature, conductivity, barometric, or rainfall data, battery level and status updates from the remote LevelSender are received with each data report.

Solinst Cloud Enabled

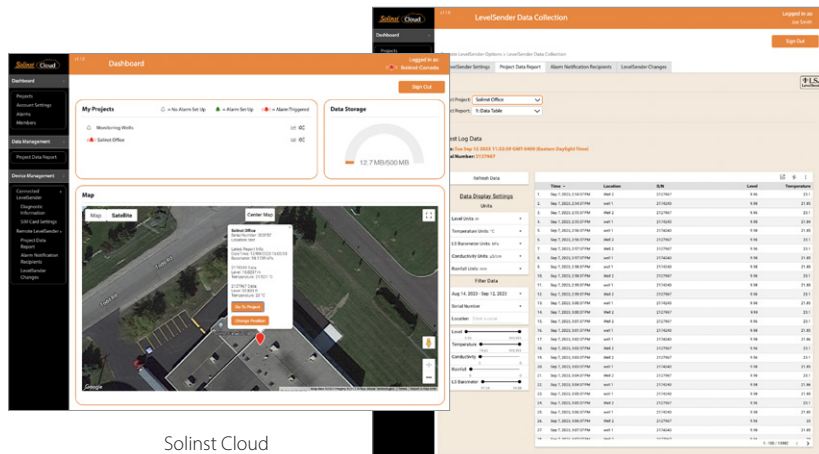
Solinst Cloud allows you to store, view and manage your data and LevelSender setups in one convenient spot. This web-based tool is easily accessed using a browser (see Solinst Cloud Data Sheet).

Advantages of LevelSender Telemetry

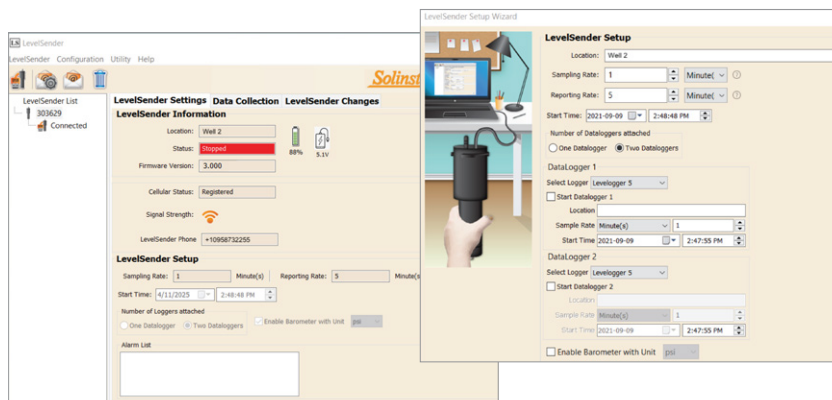
- Store and manage data and LevelSender systems using the Solinst Cloud
- FTP (File Transfer Protocol) option for data transfer from LevelSender Software
- Report barometrically compensated water level data
- Extensive coverage with cellular communication
- Ready-to-go option with pre-programmed SIM card; simplified, more reliable service provider connection
- Option to receive data on your smart device and PC; use the PC database to import to your own list
- Low cost, compact design for discreet installation
- Remotely monitor battery level and status with each report
- Set high or low level alarm notifications
- Less need to travel to remote/ hazardous locations



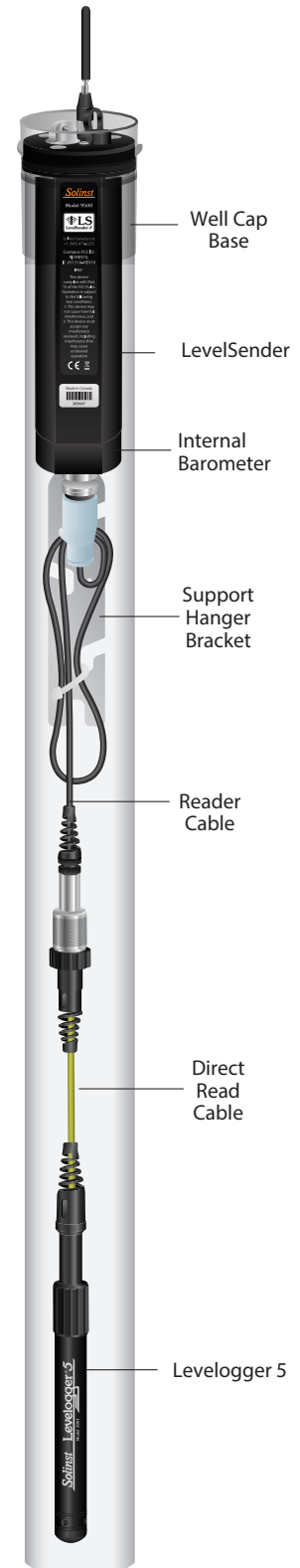
There is also the option to use Levelsender PC Software to set up your LevelSender and receive data via FTP transfer; email and SMS are also options. You can access data on your PC and right on your smart device.



Solinst Cloud



LevelSender PC Software



Single Levellogger 5 Installation

How to Use Solinst LevelSender

The initial setup for each LevelSender is through Solinst Cloud or LevelSender PC Software and a USB connection. The LevelSender is programmed with a sampling rate to collect data from the connected dataloggers. A report rate is set to send data to the Solinst Cloud or the data recipients set up using LevelSender Software.

If you desire more detailed data, the dataloggers can be programmed to record independently in their internal memory. High and low-level alarms can be set for each datalogger.

Data is sent to the Solinst Cloud, where data files are automatically updated with each report. Data is viewed in various table and graph formats and downloaded from Solinst Cloud for use in other programs.

If using LevelSender PC Software, data is sent to an FTP server, or email and SMS recipients. Data is also saved on the Home Station PC in separate files and a dynamically updated database. The database can be accessed using your applications for posting to a website or other custom setup. Data can also be viewed and exported.

Changes to the reporting schedule can be done directly through a USB cable and Solinst Cloud or LevelSender Software. Alternatively, changes can be sent remotely to LevelSender stations using Solinst Cloud or by email from the PC Home Station, which will update the LevelSender at the next scheduled report.

Features of the LevelSender

- Sized to fit inside a standard 2" well casing
- Internal barometer for automatic water level compensation
- Connection for up to two dataloggers on each device
- Low-cost Solinst Cloud or free LevelSender Software for full user control and data management
- Remote data access via Solinst Cloud or FTP; email/SMS data transmission also available
- Database is automatically updated with each new data report
- Easy programming of independent datalogger recording
- Issue remote diagnostic commands via email from the Home Station or Solinst Cloud

LevelSender Specifications	
Modem:	4G LTE UE Category M1 device: B1 (2100MHz), B2 (1900MHz), B3 (1800MHz), B4 (AWS 1700MHz), B5 (850MHz), B8 (900MHz), B12 (700MHz), B13 (700MHz), B18 (800MHz), B19 (800MHz), B20 (800MHz), B20 (800MHz), B26 (850MHz), B28 (700MHz)
SIM Card	Nano SIM (12.3 mm x 8.8 mm); option of Solinst SIM or through service provider of client's choice
Communication:	Remote access via Solinst Cloud, FTP, email or SMS
Antenna:	SMA Male Monopole 2dBi, Higher gain antenna with max. 12dBi can be sourced elsewhere.
Optional Antenna:	LTE Omni Wall/Pole Mount 790–960MHz, 1710–2690MHz and 3400–3800MHz with 10ft cable (IP68 seal kit available)
GPS:	GNSS (GPS, GLONASS, Beidou, Galileo)
Bluetooth Version:	5.1
Data File Type:	text, .xle, .sqlite
Sampling Interval:	1 minute – 99 hours
Reporting Interval:	5 minutes – 99 hours
Schedule Programming:	Directly via USB-C connection on the LevelSender or remotely via LevelSender Software (email) or Solinst Cloud
Power Supply:	3 x AA 1.5V replaceable lithium batteries , USB (batteries become backup)
Battery Life Example:	Hourly sampling and daily reporting: 433 days with 1 datalogger, 429 days with 2 dataloggers
Memory Capacity: (Between Reports)	Up to 40,000 LT logs, or 28,000 LTC logs
Operating Temperature:	-20°C – +60°C
IP Rating:	IP67
Materials:	Black Delrin®, 316 stainless steel
Size:	2.5" x 9.375" (with antenna folded down)
Weight:	16.9 oz. (478 grams)
Compatible Dataloggers:	Levellogger 5 Series dataloggers, LevelVent 5, as well as previous versions of the LevelVent and Levellogger Edge Series dataloggers
Number of Connected Dataloggers:	1, or 2 using a splitter
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 – 120 kPa
Internal Barometer Accuracy:	±0.2 kPa (2 cm)