

TempReport®



Wireless monitoring system based on T-TEC data loggers and the TempReport software.

Temperature Technology

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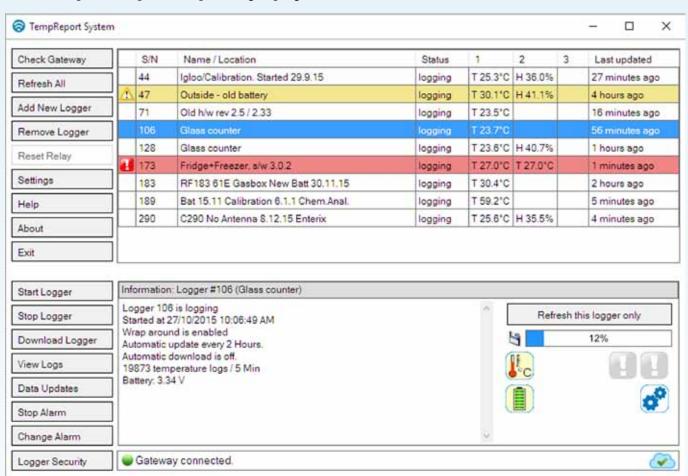
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TempReport®

TempReport is a convenient way to log, view and store data. The data loggers stay where they are monitoring temperature and transmit the actual temperatures, alarms and files, automatically and on demand. Now the monitoring is active. Gone are the days when data loggers had to be collected, hooked up by cable for download and then put back in place.

Two-way communication happens between the computer and the loggers via the Gateway. All data arrive at the computer and all loggers are operated from there.

When the computer is turned on in the morning, the actual temperatures will start to arrive. A data logger in alarm will appear in red. When the program runs in the background, a notification with alarm message will appear on the screen. Temperature updates keep coming as programmed.



Highlighting a data logger lets the user see the location, the sensor number and types, the frequency of the logging, the automatic update and file download schedule, the battery voltage and the firmware version. Refresh calls for the actual temperature.

- 1. Using the left side buttons, the logging can be started and stopped, and the file can be downloaded.
- 2. Alarms can be stopped and changed. Automatic updates and downloads and be set or changed.
- 3. Security can be set for each logger according to the requirements: access may be limited for some users, and the loggers can be protected from outsider access.
- 4. Downloaded files can be viewed in 'View logs'. The chosen data will appear as a graph in the Graphviewer, with facilities for zoom and plot, printing and saving for spreadsheet programs.

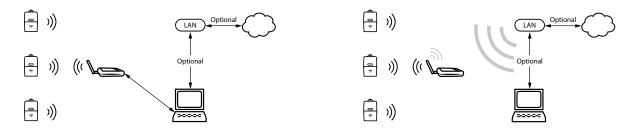
Configuration possibilities

T-TEC RF data loggers communicate wirelessly to a Gateway, within 300 meters clear line of sight. The distance between the Gateway and the computer can be extended by connecting a Gateway to a LAN. A computer connected to the same LAN can detect and share that Gateway, or the Gateway can send the data to a server (either in-house or on the Internet) to store and distribute the data. A limitless number of computers can access that server and download the data. With the correct user permissions, it is also possible to remotely change the data logger settings eg. stopping, starting, downloading, change alarm, and so forth.

The T-TEC RF data logger system is scalable: data loggers can be easily added, either locally or remotely. Up to 50 data loggers can communicate with one Gateway.

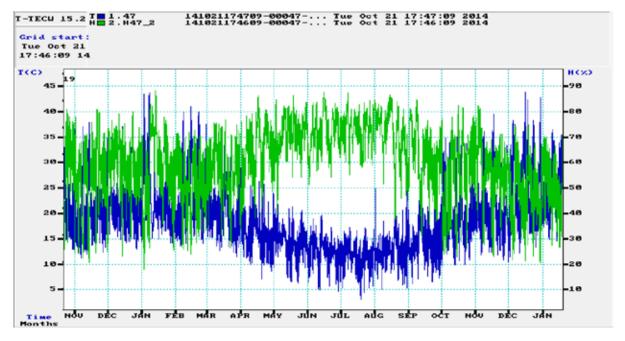
One or many T-TEC RF data loggers can communicate via:

- a single Gateway connected to a single computer via USB.
- many Gateways each connected to a different computer via USB.
- one (or many) Gateway(s) with WiFi connected to the LAN serving one or many computers.
- one (or many) Gateway(s) with WiFi connected to the LAN sending data via the Internet (no computers).



Access Control

The logger communication is protected in several ways: all communication is encrypted, so that no interference is possible. Access may be based on software key, so that neighbours cannot read each others' loggers. Passwords to grant limited access may be set; for example: specific departments can have access to their own data, but the administrator reserves the rights to change the set-up of the data logger: naming, starting / stopping / changing alarms.



Outdoor temperature and humidity in Adelaide – from wireless T-TEC logger in wrap-around mode. This data set has 1.3 million logs, stored in the database.



Data logger specifications

Temperature accuracy $\pm 0.2^{\circ}\text{C}$ or better Humidity accuracy $\pm 3\%$ or better Time accuracy $\pm 1 \sec / \text{day}$ Resolution 0.1°C or better Casing Polycarbonate IP rating 68 watertight Size (mm) $65 \times 31 \times 106$

Weight 115gAmbient -40 + 85°C Display Optional Battery $\frac{1}{2}$ AA, 3.6V

Battery lifetime 1 year, normal use, use

replaceable

Memory 100,000 + logs (typically)

Logging interval User adjustable: 1 second to 6 hours

Display of actual temp Available on T-TEC 7 RF
Remote sensor Many options available
Wall bracket Stainless steel optional

Interface Gateway
Signal 433 MHz
Range 350m free air

Antenna Internal/external optional
Security Signal encryption and

access control

ID Permanent serial number

Warranty 2 years

T-TEC Wireless data loggers

10 good reasons to choose TempReport®

- 1. The data loggers stay where they are installed.
- 2. The system is near real time.
- 3. Loggers can be accessed any time.
- 4. Updates happen automatically.
- 5. Files are downloaded at set intervals.
- 6. Alarms are sent ASAP.
- 7. Optional relay output from Gateway.
- 8. Files are continuous; new logs add to data set.
- 9. Database in house or in the cloud if preferred.
- 10. Large internal memory (100,000 + logs)

T-TEC wireless data loggers are available in a range of models, suitable for many applications and temperature ranges:

- with or without display,
- with one or two channels,
- fixed or attached sensors,
- · for temperature or temperature and humidity,
- for temperatures from -200 to 400°C
- choice of sensors
- for mA or V,
- with internal or external antenna

Please see logger leaflet.

Installation

The data loggers do not need any special installation as they are battery operated. They can hang or lie down where they are needed. Easy!

Files

The wireless T-TEC data loggers have a very large memory. When downloaded, the data are kept in a database on the computer and new downloads are added to form a continuous data set. Data are encrypted and tamper proof.

Gateway

Must be connected to a USB port or WiFi with power adapter. It is listening for the loggers in the system and communicating with them as required. The Gateway can have a relay for alarms.

Cloud

If cloud access is enabled, files will also be sent to remote storage of your choice. This can be your own local server or elsewhere. Other computers can then remotely access the files.





