

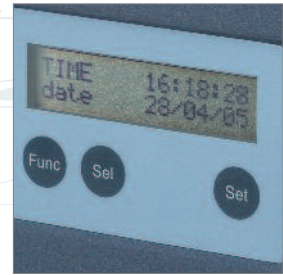
Squirrel OQ610 series temperature data logger

Dedicated data logger for temperature and through process monitoring

Overview

The OQ610 temperature data logger is suitable for a wide range of temperature recording applications in industry, research and development. It is available as a stand alone temperature data logger or as part of a complete system for through process monitoring in the food and paint industries.

With the addition of a thermal barrier the Grant OQ610 is suitable for use in through process applications where heat treatment is being used to produce a product. To ensure consistent quality of heat treated products, it is important to have proof that they have passed through the manufacturing process at the right temperature for the right amount of time. By passing the Grant OQ610 oven logger through the process along with the products, a temperature profile can be produced to show exactly what is happening to the products and the process. Benefits include improved quality of your product and increased efficiency, reduced energy costs, quality assurance reports for compliance and traceability and complete quality control for your process.



Key features

- » 6 channels for use with a wide range of K or T type thermocouple probes
- » Battery operated and easily portable
- » Simple 3 button operation via built in display or from PC
- » Can be configured to automatically start and stop logging at specific times or temperature levels
- » Fast sample rates for fast process times: up to 8 samples / second
- » Can provide automatic cure calculation in through process applications
- » Non-volatile memory provides up to 260,000 readings of secure data
- » Time and date reported with each reading
- » Magnetic catch for battery compartment

The Squirrel OQ610 series comprises two models:

- » **OQ610-S**
 - Supplied complete with SquirrelView for through process applications
- » **OQ610**
 - Supplied complete with PaintView for paint oven monitoring applications

- » 6 channels for type K or T thermocouples
- » Compact and simple to use
- » High accuracy
- » Extended battery life

Small, lightweight, battery operated and portable

Quick and easy to program via three push buttons and display, or via PC

Start and stop logging at specific times or at certain temperature levels



Automatically detects when sensors are present – easy set-up of up to 6 channels

Squirrel OQ-610 Technical Specifications

Accuracy	-50 to 500°C - ± 0.5°C -200 to 1300°C - ± 1.0°C
Resolution	0.1°C
Sampling rate	Fastest: eight times per second per channel Slowest: once every two hours per channel
Channels	6 K or T type thermocouples
Temperature measuring range	-200°C to 1300°C (K type) -200°C to 400°C (T type)
Operating environment	Temperature range -30 to 65°C Humidity 95%
Memory	Flash memory of 260,000 readings
Maximum runs stored	8
Communication	USB 1.1 and 2.0 compatible
Display	Alphanumeric display of 2 x 16 characters shows pass/fail, battery status, probes connected, real time readings and communication to printer or PC
Power supply	Two AA cells to give 200 hours operation at default settings
Dimensions and weight (l x w x h), g	148 mm x 95 mm x 21 mm, 450g

SquirrelView Software

Powerful and easy to use spreadsheet style software for configuring, downloading, displaying and analysing data. SquirrelView Plus upgrade available including real-time charts and historical data. Further details on page 27.

Probes

Suitable for use with wide range of thermocouple sensors. Full range available in the Probes section page 34.

Applications



Food production



Pharmaceuticals



Oven logging

Capabilities

- » Flexible start / stop
- » Scale and review readings in real-time on the integral display or on a PC running SquirrelView or PaintView

SquirrelView & SquirrelView Plus Software

SquirrelView – supplied with every Squirrel

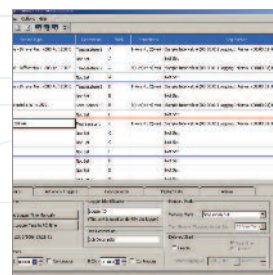
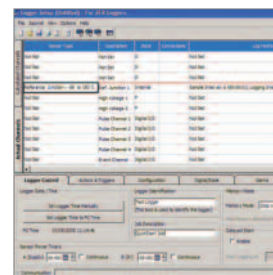
SquirrelView is a universal software package that is included with every new Grant Squirrel data logger.

Its intuitive, user friendly, spreadsheet style interface allows quick set-up of the data logger for any application, speedy download of data and direct export to Excel™. SquirrelView Plus gives additional benefits such as graphical data analyses and advanced reporting options.

Minimum PC specification: – Windows® XP, Vista or Windows 7; Pentium II 266MHz; 60Mb hard disk space and 1 CD drive, colour SVGA screen (1024x768 recommended), at least one RS232 or one USB port, mouse.

Key features

- » Intuitive, user friendly spreadsheet style setup allows quick logger configuration in any application
- » Flexible data presentation allows you to quickly display and analyse real time or historical data as a line graph, bar chart or analogue gauge
- » Graphical alarm and event identification lets you easily identify occurrences around specific analogue or digital events e.g. pump coming on
- » Quick Graph function lets you quickly and easily view large data files
- » Export data into Excel™ in real time, or as a CSV file for customisable data analysis
- » Easily view and control the logger status from one single screen
- » Use the simple communication wizard for hassle free working with modems, Ethernet, GSM, etc.
- » Download data by date, time or events, saving time when working via modem or looking for specific data
- » Save settings on the PC for efficient re-use
- » Protect your data and set-up configurations with the security function



SquirrelView Plus-Analysis

SquirrelView Plus lets you quickly and easily analyse the data from your Squirrel data logger in a familiar Explorer™ style interface. Data can be displayed with 2 different auto scaling Y-axes. This is particularly useful when displaying widely varying data from different sensors on one graph. You can also zoom in on areas of interest, use a cursor to pick out exact values, times and dates, get a statistical summary of your data, set high and low alarm thresholds and, using the calculation function, you can create new virtual channels from existing channels.

SquirrelView Plus also incorporates a report generation facility, which allows you to create custom report templates consisting of a title page with descriptive text, headers and footers, graphs, tabular list of data, statistics and data logger setup information. Templates can be setup with any of these combinations and saves time when preparing similar presentations of data.

SquirrelView & SquirrelView Plus System Specifications

- SquirrelView & SquirrelView Plus

Setup

- » Setup can be verified before it is sent to the logger
- » Converts setup files from previous Setwise software to SquirrelView
- » Hide facility allows you to tailor setup interface to your own requirements
- » Print setup information

Meter Mode

- » Displays up to 16 channels in real time
- » 3 Plot types: line graphs, gauges & dials
- » Auto scaling of Y axis
- » Value readout at cursor position
- » Saves metered data for re-use in other software packages
- » Graph printout facility
- » Graph can be presented in various styles

Download

- » Download directly as a CSV file
- » Download straight to a graph
- » Download by date & time (SQ20xx only)
- » Data downloader application (SQ2010, SQ2020, 2040 series)

Export

- » Easy to use export wizard
- » Customisable data export for Excel™, Lotus™ or other applications
- » Export viewer allows quick view facility of data

Additional features

- » Tips of the day - provides informative shortcuts
- » Logger diagnostics
- » Security feature enables password setup
- » Communication wizard enables easy setup of USB (20xx only), RS232, Ethernet and Modem, Wi-Fi (Wi-Fi models only)
- » Interactive Help
- » Spanish and German versions available

- SquirrelView Plus Version only

Analysis

- » Easy analysis for: SQ20xx, SQ400/800, SQ1000, SQ1600, SQ1200/1250 and 600 series loggers
- » Easy to use Explorer style interface
- » Fully configurable data views
- » Creation of templates
- » Flexibility for customisable reports
- » Facility to include text comments with graphs
- » Flexible zoom feature including X and Y axis
- » Statistics calculator
- » Auto scaling of Y axis
- » Value readout at cursor position
- » Set and view high and low level thresholds
- » Customisable report facility: prints out graphs, readings, etc
- » Tolerance curve
- » Calculated channels
- » User notes
- » Archives
- » File convertor from Setwise and Squirrelwise
- » Product cure calculation
- » Display oven profiles and oven zones
- » Append/add data files
- » Import CSV file

Minimum computer requirements

- » Microsoft Windows XP™, Vista™ or Windows 7™
- » Pentium II 266 MHz
- » RAM as specified by PC operating system
- » 60 Mb hard disk space and 1 CD drive
- » Colour SVGA monitor running at 800 x 600(1024 x 768 recommended)
- » 1 RS232 or USB port (where applicable)
- » Mouse

Please note: 1200/1250 loggers require SquirrelView Plus to operate. Due to limitations of these loggers, setup, status and meter mode features are not supported.