

Tinytag Explorer is the Windows based software for working with a Tinytag Radio System. Users can access their data and manage their system through a simple and intuitive interface.

Radio loggers can be worked with individually or in groups, making it easy to manage a system containing a large number of devices. The software shows the status of each device in a system as well as alarm warnings and low battery indicators.

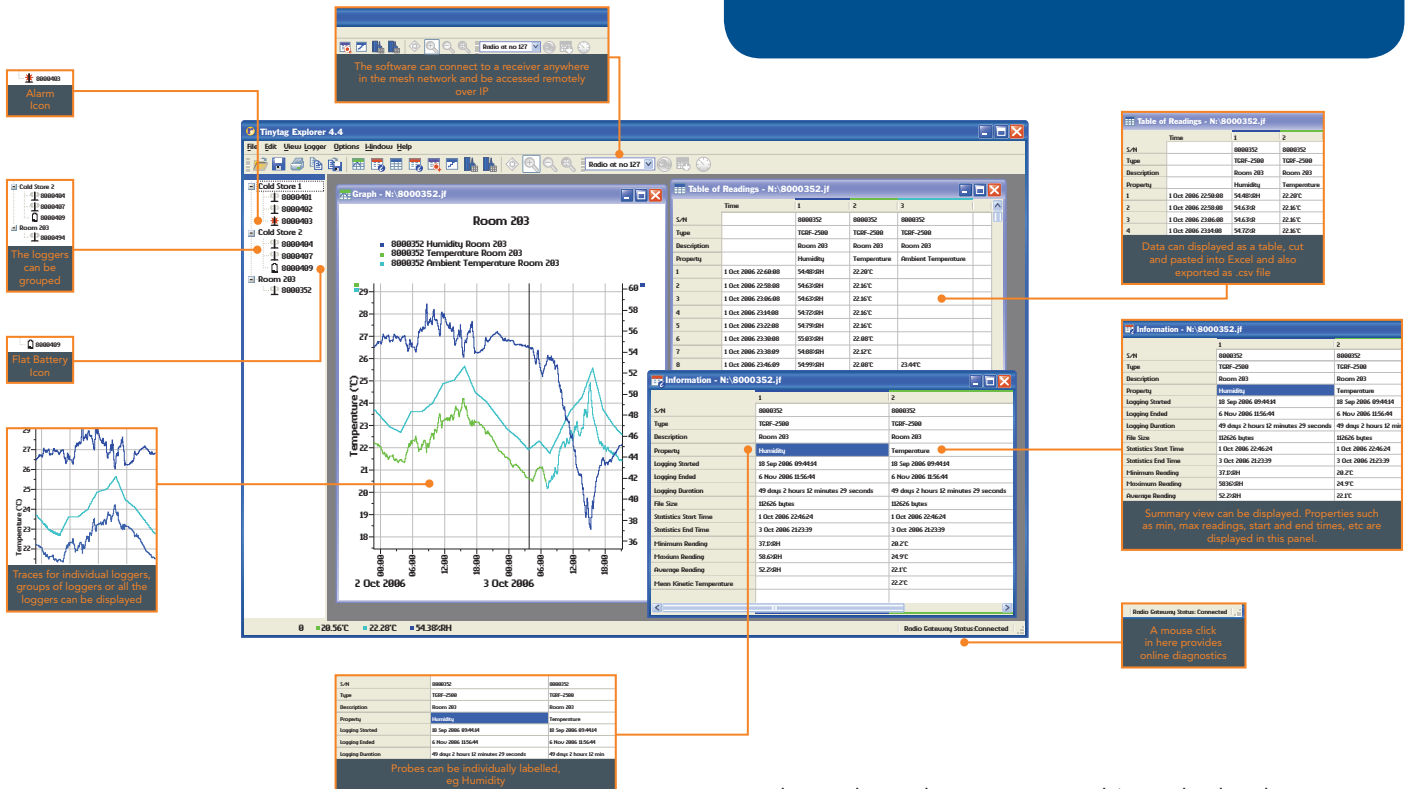
Data from multiple radio loggers, and other Tinytag data loggers, can be combined into a single graph.

Data can be exported easily from the software in a number of different formats and accessed directly by users who wish to integrate data within their own systems.

The software works over existing computer networks and the internet to allow users to remotely manage and view their data.

The system can generate e-mail warnings when alarm limits are breached, providing 24 hour coverage.

The software supports the connection of multiple receivers, enabling isolated parts of the same site to be monitored simultaneously, and the wired connection of two receivers to enable communications through barriers that radio waves cannot pass.



The software can connect to a receiver anywhere in the mesh network and be accessed remotely over IP.

Alarm icon

The loggers can be grouped

Flat Battery icon

Traces for individual loggers, groups of loggers or all the loggers can be displayed

Table of Readings - N: 8000352.jf

S/N	1	2
8000352	8000352	8000352
Type	TICF-2500	TICF-2500
Description	Room 203	Room 203
Property	Humidity	Temperature
1	1 Oct 2006 22:48:00	54.6398
2	1 Oct 2006 22:58:00	54.6398
3	1 Oct 2006 23:08:00	54.6398
4	1 Oct 2006 23:18:00	54.6398

Data can be displayed as a table, cut and pasted into Excel and also exported as .csv file

Information - N: 8000352.jf

S/N	1	2
8000352	8000352	8000352
Type	TICF-2500	TICF-2500
Description	Room 203	Room 203
Property	Humidity	Temperature
Logging Started	18 Sep 2006 09:44:04	18 Sep 2006 09:44:04
Logging Ended	6 Nov 2006 15:56:44	6 Nov 2006 15:56:44
Logging Duration	49 days 2 hours 12 minutes 29 seconds	49 days 2 hours 12 minutes 29 seconds
File Size	1026 bytes	1026 bytes
Statistics Start Time	1 Oct 2006 22:48:04	1 Oct 2006 22:48:04
Statistics End Time	3 Oct 2006 22:23:29	3 Oct 2006 22:23:29
Minimum Reading	37.5981	20.2°C
Maximum Reading	58.2581	24.9°C
Average Reading	52.2581	22.1°C
Mean Kinetic Temperature		22.2°C

Summary view can be displayed. Properties such as min, max readings, start and end times, etc are displayed in this panel.

Radio Gateway Status: Connected

A mouse click here provides online diagnostics

Probes can be individually labelled, eg Humidity

Features

• View data and manage radio loggers remotely

The radio system can be accessed remotely, allowing users to view data and configure radio loggers from their own computer. A Windows service, called the radio gateway, runs in the background behind Tinytag Explorer managing the data from the radio system and enabling remote access for other users on the same network or via the internet.

• Manage groups of loggers simultaneously

Radio loggers can be assigned to groups so that they can be configured or their data viewed collectively rather than having to work with each unit individually. This makes it easy and efficient to manage a system containing a large number of devices.

• Identifying loggers

Every radio logger has a unique serial number. Descriptions can be assigned to groups of loggers, individual devices and their different channels to allow users to easily identify their data.

• Alarm warnings

Two programmable alarms for each channel allow upper and lower limits to be set, and a delay can be programmed to allow routine work to be carried out

without alarms being triggered (e.g. the loading or unloading of a fridge or walk-in freezer). Alarms show as a flashing icon in the software, and e-mail alerts can be sent to warn users of potential problems 24 hours a day.

• Data export and access options

Data can be exported or accessed directly from the radio system in a number of ways, from simple copy and paste from Tinytag Explorer, to Modbus and http access for integration with third party systems (see below for further information).

• Multiple receiver configuration

A master/slave configuration allows additional receivers to be added to a system enabling easy expansion over larger sites. These receivers can be connected to other computers on the same network, or connected through a TCP connection.

• Collate and compare data

Tinytag Explorer enables users to easily combine data from multiple logging runs into a single graph. This allows similar processes to be grouped together or different conditions to be compared. Data can also be displayed in a table and an information view gives the user setup and basic statistical information about the logging run. Daily minimum and maximum values can also be displayed. All of these views are linked, so updating the range of the graph view will automatically update the other views.

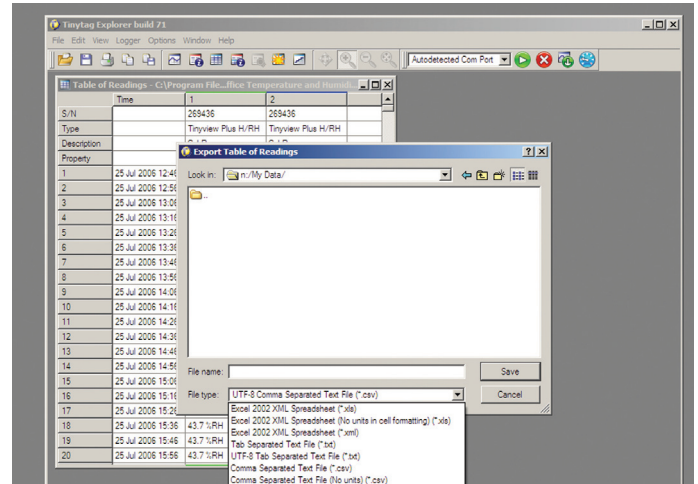
Exporting Data

Data can be exported from both Tinytag Explorer and the Radio Gateway.

Tinytag Explorer Exports

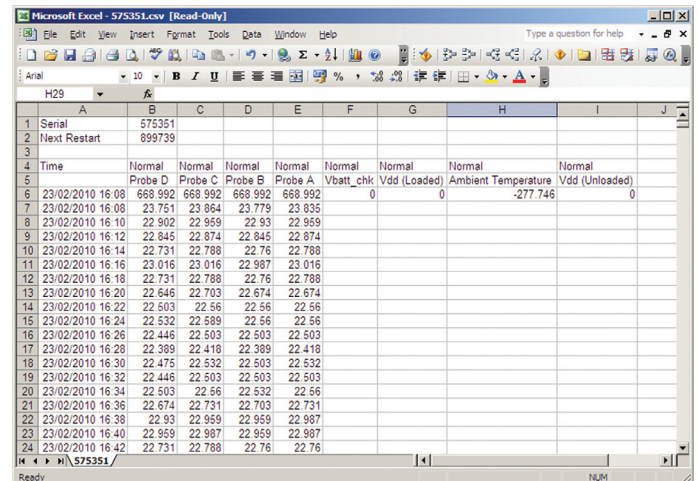
Data displayed in the Table of Readings, Information and Daily Min/Max views can be exported from Tinytag Explorer simply by copying and pasting, or by saving files in .xls, .xml, .txt or .csv formats.

Graph images can also be pasted into other documents, or saved as bitmaps.



Radio Gateway Exports - CSV Export

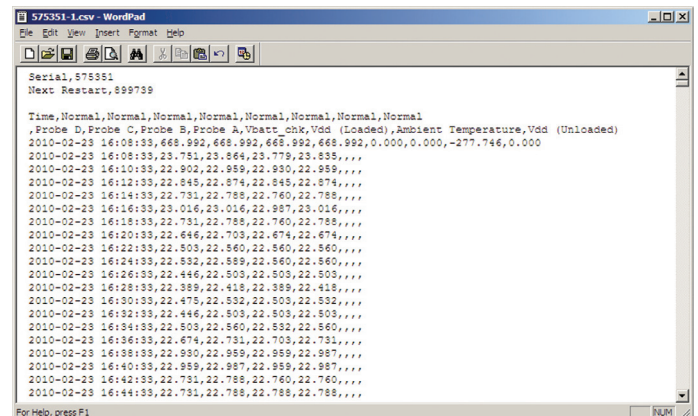
The Radio Gateway provides access to logged measurements for third party software by downloading CSV files over http. Each radio logger in a system has its own unique address and this can be used to obtain full file exports or incremental data for a unit.



Radio Gateway Exports - Modbus

The Radio Gateway Service provides a standard Modbus-over-TCP interface, providing read-only access to data logger configuration and instantaneous measurements (instantaneous measurement means the last received logged measurement).

Modbus may be a convenient option for software which uses Tinytag data loggers as part of an industrial process control or SCADA system.



Tinytag Explorer System Requirements

Radio Gateway Service

The Radio Gateway Service requires a computer that can be left running permanently with the following minimum specification:

Operating System:	Windows 2000, XP, Vista or Windows 7
Processor:	200MHz Pentium III processor or better
Memory:	512Mb
Hard Disk Space:	At least 30Mb available
Monitor for installation:	Minimum 256 colours, resolution 800 x 600

The requirements for running the Radio Gateway Service on an existing server are shown below.

CPU time:	Negligible
Memory:	20Mb
Hard Disk Space:	Typically 10Mb for programs, 5Mb for data.

The service stores a small amount of configuration information in the Windows Registry, in HKEY_LOCAL_MACHINE/Software/Tinytag/Kola. Cached measurement data and diagnostic logs are stored in C:\Program Files\Tinytag\Tinytag Explorer\var\. These locations should ideally be included in any regular backup, which can be safely taken while the service is running.

Tinytag Explorer

Tinytag Explorer requires a PC with the following specification:

Operating System:	Windows 2000, XP, Vista or 7.
Browser:	Internet Explorer version 7 or above; Firefox version 2 or above.
Processor:	200MHz Pentium III processor or better (1.6GHz recommended).
Memory:	512Mb (1024Mb recommended for Vista & 7).
Hard Disk Space:	At least 30Mb available hard disk space (120Mb recommended).
Monitor:	Minimum 256 colours, 800 x 600 resolution or greater recommended.

The recommended options above should give the user ample performance to run other applications such as MS Excel, Word etc at the same time as Tinytag Explorer.

Software Licence

Tinytag Explorer is supplied under a site licence which means that it can be installed on as many computers as the customer wishes at a given location (additional copies of the software are required for each additional site the software is used at).

To view the full software licence, please visit our web site here:

<http://www.tinytag.info/info/tinytag-explorer-licence-agreement>

Approvals

Gemini Data Loggers (UK) Ltd. operates Quality and Environmental Management Systems which conform to ISO 9001 and ISO 14001. The scope of these systems covers the manufacture, design and supply of data loggers and their associated software, accessories and services.

