



Battery Temperature Monitoring System YPCBM1



Specifications

Hardware

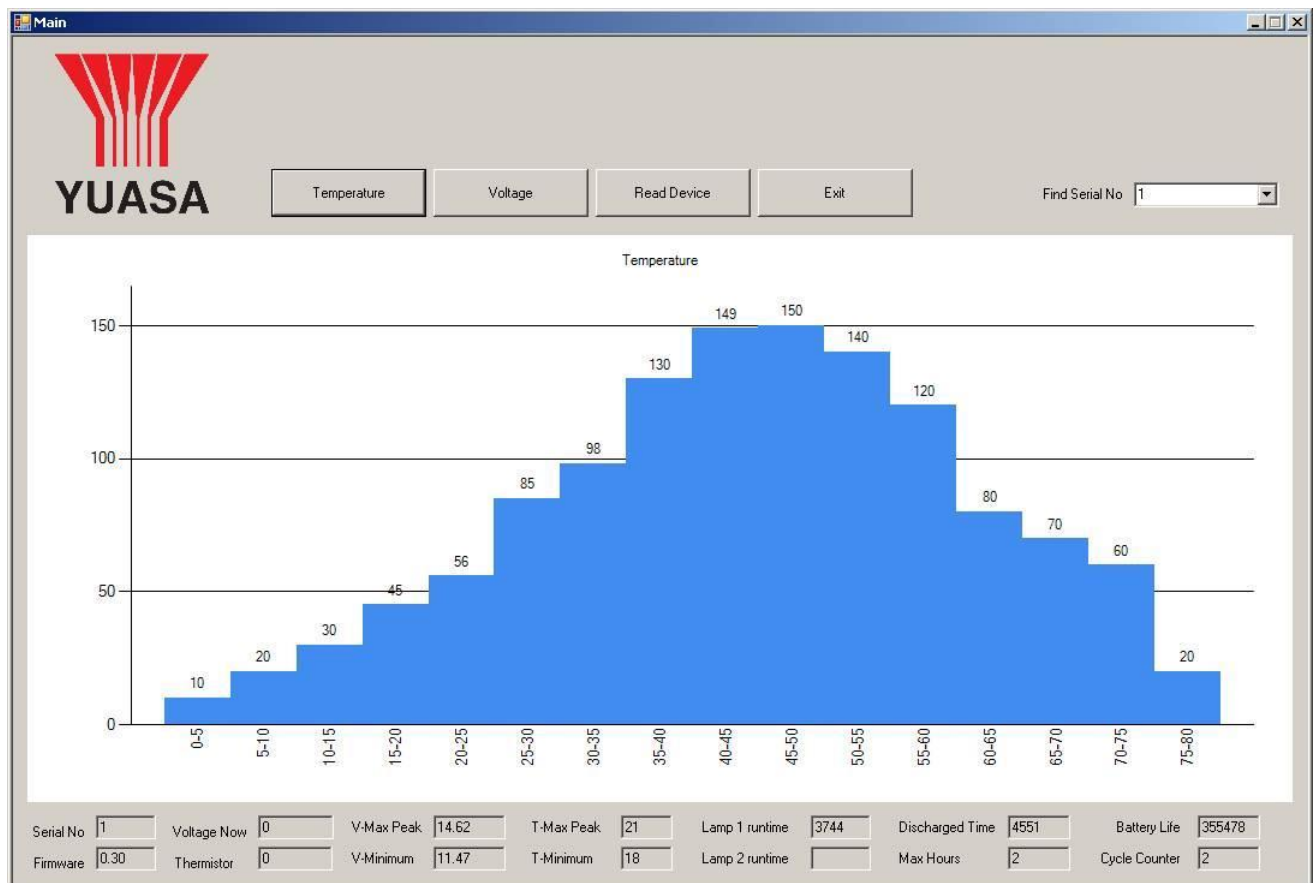
- ☐ Continual monitoring with hourly logging of temperature and voltage
- ☐ 2 degree Celsius temperature allocation bands
- ☐ 7.5 years rolling data storage
- ☐ Check Sum fault protection
- ☐ Non Volatile Data Storage
- ☐ Readable Data Set via 2.5mm output socket (lead available separately part code YPCBL1)
- ☐ Read in situ or Remove from site and Read
- ☐ Maximum / Minimum Voltage over life
- ☐ Total commissioned Age
- ☐ Battery Serial Number (set when commissioned)
- ☐ Voltage now (at time of download)
- ☐ Thermistor reading now (at time of download)
- ☐ Precision Band-gap Voltage reference
- ☐ Extremely low standby current from 0.02 micro amps (0.00002 amps)
- ☐ Extremely low voltage drop in normal charge and load states
- ☐ Small size SMT assembly with two N-Channel MOS Switch Outputs
- ☐ Serial 1-Wire interface to download fault log and status
- ☐ Fault tolerance to 30v (12v Battery)
- ☐ Comes with bare leads to allow for site specific connectors
- ☐ Optional equipment available to allow for live working

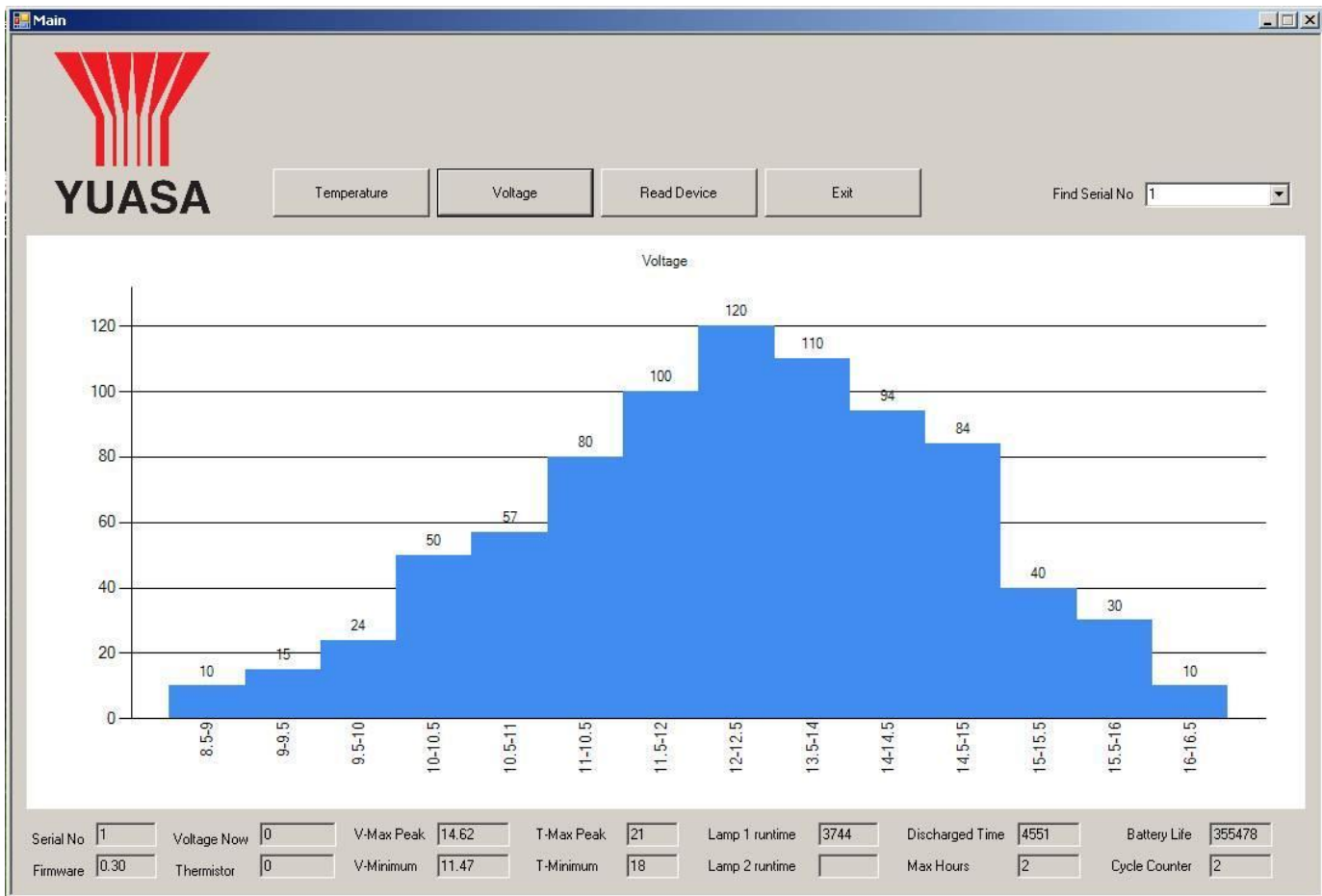


- Can connect to 12v or 24v Battery, each lead is approximately 300mm in length allowing for a terminal gap of 620mm max
- Unit dimensions: 40mm(±1mm) x 40mm(±1mm) x 14mm(±0.5mm)

Software

- Configurable to requirement
- Encoded against corruption
- Exportable to master documentation and further analysis
- Exportable to Graphic Displays
- Common File formats (Excel, csv, text)
- Data e settable via service software (Serial number / Data and log files)







March 14

Battery Temperature Monitoring System Instructions

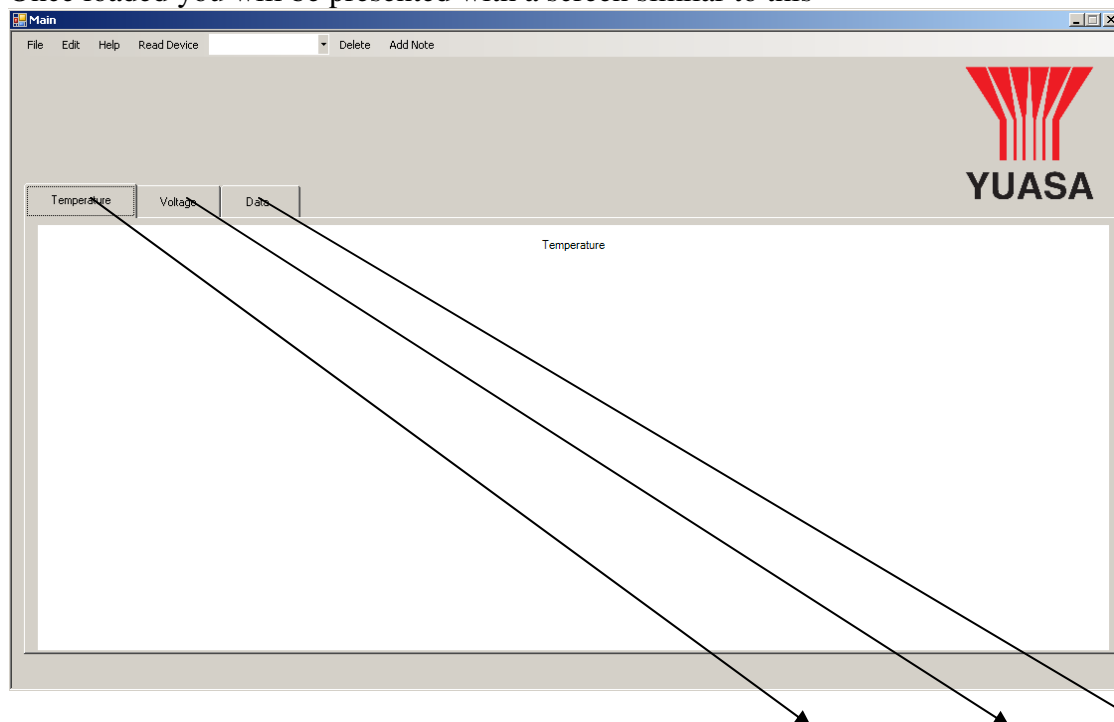
In order to use the Yuasa Data Logger you will need
PC computer XP or Windows 7
One connection lead Part no YPCBL1
One Data Logger Part no YPCBM1

Connect the data logger to your computer using the supplied PC lead YPCBM1.
Yuasa recommend 1 x YPCBM1 per string of batteries.
Install the Battery Monitor software.

Note: Ensure that Charger/UPS is isolated from the battery being monitored before connecting lead to the temperature monitor. Optional equipment is available to allow for safe on-line working.

Connect the data lead to the computer via USB port and straight to the Data Logger via the Jack Plug.

Once loaded you will be presented with a screen similar to this



On the main screen we have the following tabs. **Temperature**, **Voltage** and **Data**, Temperature and Data will display graphs generated from the data read from the battery



logger.

The final tab, Data displays the main data read from the device.

At the top of the screen we have the **File, Edit, Help, Read Device, serial number** drop down, **Delete** and **Add Note** menus.

The file menu contains the following options, **Read Device, Export to CSV, Log in, Print** and **Exit**.

The **Edit** menu options are only available when logged in; these options are **Read Raw Data, Set Serial Number** and **Change Password**.

Under the **Help** menu you find Help and About.

Basic Functions

To View data from the Logger Click Read Device

Click read device and the read device window will open, and will attempt to read the information stored on the battery logger. If the read is successful the various fields will be populated with information. The blank white area at the bottom can be used for entering any notes you may wish to save with this data.

Clicking save will save the data to the Battery Monitor database along with any notes that are entered. The read device window will automatically close on successful saving of the data

A screenshot of the 'Read Device' window. It contains a list of fields with their values: Serial No (3), Firmware (0.35), Voltage Now (13.09), Thermistor (24), V-Max Peak (14.75), V-Minimum (12.27), T-Max Peak (35), T-Minimum (12), Cycle Counter (3), Lamp 1 runtime (0), Lamp 2 runtime (0), Battery Life (1 Wks 4 Day 4 Hrs 52 Min 7 Sec), Discharged Time (0), Max Hours (0), Therm ADC Raw (640), and Cal Setting (177). Below these fields is a large text area for notes. At the bottom are 'Save' and 'Close' buttons. The status bar at the very bottom says 'RL104 Connected: COM6'.

Read Device will launch the read device window.

As shown left.

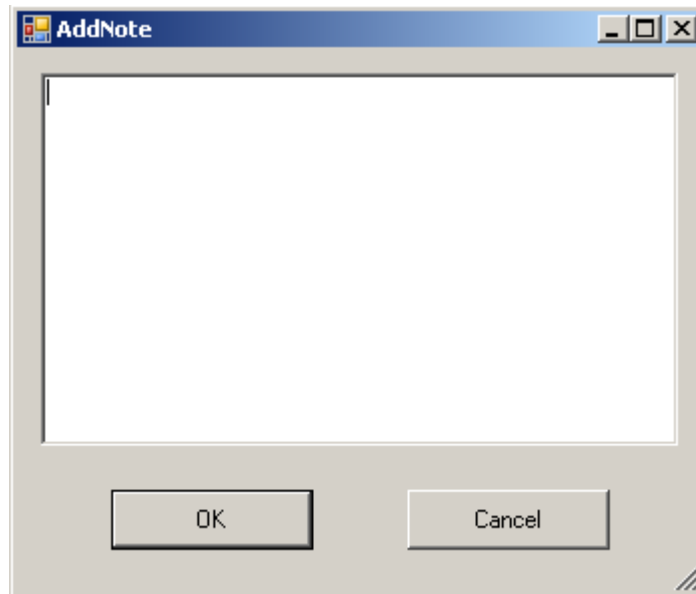
The final drop down is for saved **serial numbers**. This will be populated as data is read and is saved into the software, each device has its own unique serial number, the data from that device will be saved on this drop down.

Delete is used for removing serials from the database and

Add Notes allows further notes to be added to the selected serial number.

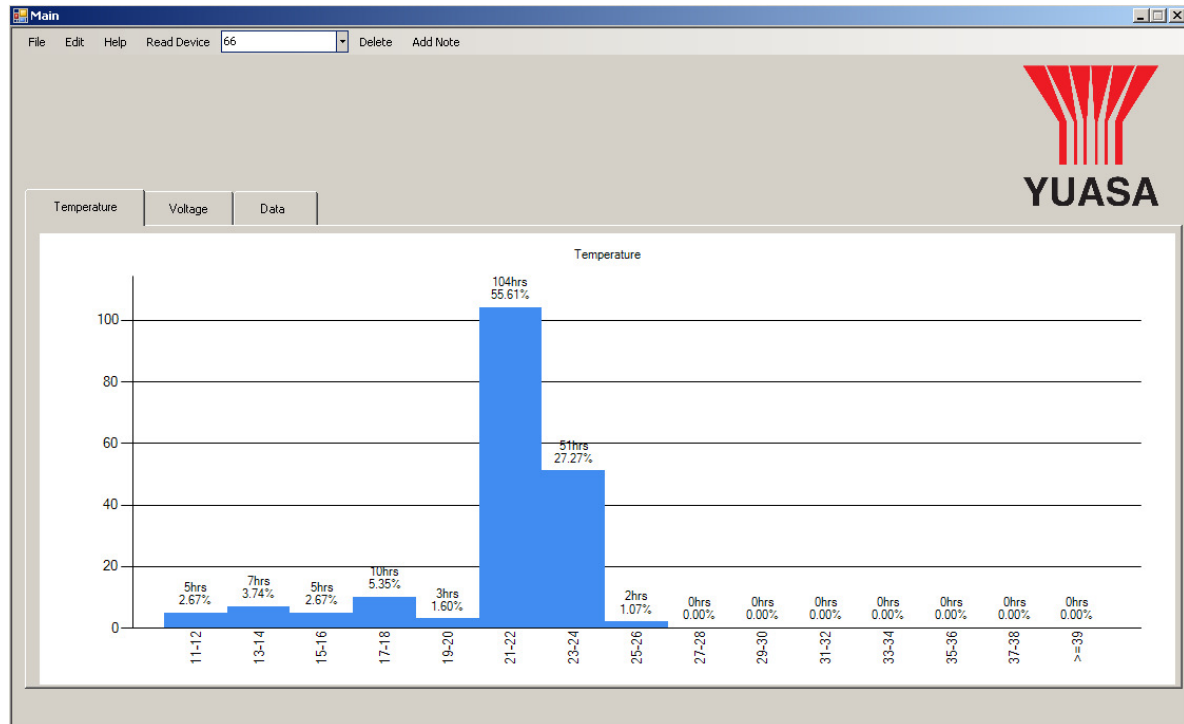


Further note can be entered using the add note button



This additional note will be added to the serial number that is selected on the serial number drop down menu.

On selecting a serial number you will be presented with the graphical information for Temperature, Voltage and number key data under the Data tab. The Data tab will also contain any notes you have saved along with a data and time stamp of when the device was read.



The information displayed can be printed to a report using the print option under the File menu or exported to a CSV file. The CSV can be opened in any spread sheet package.