

The KTA-250 Log Downloader Software is a software package for configuring, downloading, viewing and exporting logged data from a KTA-250 with logging.

Setup:

When the software first runs the main window appears

KTA-250 Log Dow	nloader V1.	0.0.1	×
Port: COM1 Set Date and Time Poll 1 of 656 Lat Start Number Register of Logs	Select Port Config Logging st Logging Start Date	Close Rez Logg Start Time	Port ad ings nstantaneous Average MaxMin
	Date		
Export Format Windows Time Unix Time ASCII Time	Export Import	Sel	iew ected

Figure 1: Main Window

Clicking "Select Port" opens the port configuration window.

Connect the KTA-250 to the computer via USB Set DIP Switches S2-3 and S2-4 ON and Set DIP Switches S2-1 and S2-2 OFF and then apply power to the device.

USB Virtual COM port drivers can be downloaded from <u>http://www.ftdichip.com/Drivers/VCP.htm</u> if required. The COM port assigned to the KTA-250 should be selected from the list of ports. If the window was opened before the device was connected clicking "Refresh" will refresh the list of available ports.

Ports	-		x
Refresh			
COM2		🔽 Defa	ault
COM3 COM4	Address	Baud	Parity
COM4 COM5 COM9	1 2 3 4 5 6 7	2400 4800 9600 19200 38400 57600	None Odd Even
ОК		Clo	se



Select Address 1 and leave Default checked (DIP Switch S2 should be OFF-OFF-ON-ON). Consult the KTA-250 Manual for alternate Address, Baud and Parity settings for different DIP Switch configurations. Clicking OK opens the port and returns the user to the main window.



Configuring the Clock:

In the main window the "Set Date and Time", "Config Logging" and "Read Loggings" buttons will now be enabled. The "Set Date and Time" button will open the Date and Time window, Clicking Update Device will write the current Date and Time to the KTA-250.

Current Time in Device: 00:00:00 00/00/2000
Current Time (PC): 13:39:31 22/03/2012
✓ Use PC Time YY MM DD HH mm ss 12 03 22 13 39 31
Update Device Done

Figure 3: Date and Time Window

Logging Configuration:

The "Config Logging" button will open the Logging Configuration window. From this window the configuration can be read from or written to the device.

There are three sets of parameters that can be logged to the memory of the device.

- 1. Instantaneous Speed and Direction This is the Wind Speed and Direction at the instant the device is logging from 0 Km/H to 255 Km/H in 0.5 Km/H increments and from 0° to 360° in 2.83° increments.
- Average Speed and Direction This is the Vector Average of Wind Speed and Direction since the last logging, calculated at 1 second intervals and recorded from 0 Km/H to 255 Km/H in 0.5 Km/H increments and from 0° to 360° in 2.83° increments.
- 3. Maximum and Minimum Speed This is the Maximum and Minimum Wind Speed since the last logging, recorded from 0 Km/H to 255 Km/H in 1 Km/H increments.

 Instantaneous Speed/Dir Average Speed/Dir Max/Min Speed 1 Log Period (seconds) Log For 0 Seconds 0 Years 0 Weeks 0 Days 0 Hours O Hours Clear Memory 0 Seconds 	🛮 Logging Configuration		
Max/Min Speed Max/Min Speed 1 Log Period (seconds) Log For 0 Seconds 0 Years 0 Weeks 0 Days 0 Hours 0 Minutes 0 Seconds	Instantaneous Speed/Dir		
1 Log Period (seconds) Log For 0 Seconds 0 Years 0 Weeks 0 Days 0 Hours 0 Minutes 0 Seconds Read From Device Done	Max/Min Speed		
0 Hours 0 Minutes 0 Seconds Read From Device Device Clear Memory Denory Done Done	Log Period (seconds) Log For 0 Seconds 0 Years 0 Weeks 0 Days		
Read From Device Write To Device Done	0 Hours 0 Minutes 0 Seconds		
	Read From Device Write To Device Done		

Figure 4: Logging Configuration

The Log Period is the time in seconds between each logging, from 1 second to 8192 seconds (2:16:32). The software will calculate how long the device will log for given the selected parameters and the Log Period. Choose a Log Period that will cover your intended logging duration.

When the logging memory is full the device stops logging and if an LCD is installed periodically displays "Mem Full No Log". After the loggings are downloaded from the device the memory can be cleared by clicking "Clear Memory".



Clicking Done closes the window and returns to the main window.

Reading Loggings:

Clicking the "Read Loggings" button will begin downloading the loggings from the device. The time can vary depending on the baud rate used. When the last logging has been downloaded the download will stop. Once the download has stopped a list of loggings will be displayed.

Each item on the list has a start date and time, number of logs and also shows which parameters were logged.

Viewing Loggings:

Select an item from the list and click "View Selected" to view graphs of wind speed and direction and a table of values.



Exporting Loggings:

Logging data can be exported in CSV format for storage and manipulation in third party software.

First select the time stamp format using the radio selection.

"Windows Time" Will output a file with floating point time stamps natively recognised by excel and the windows operating system.

"Unix Time" Will output a file with integer time stamps in the unit time format of seconds since Unix Epoch.

"ASCII Time" Will output a file with a plain text time stamps easily readable by humans but not as suitable for data manipulation by third party programs.

Once the time stamp format is selected click "Export" and select a file name and location.

By default, the file name is based on the start date and time, but can be changed to anything desired.

Import Loggings:

Previously exported data can be imported and viewed by clicking the "Import" button. The time stamp format is automatically detected when importing data.

The time stamp format of an exported file can be changed by importing and then exporting with the desired format.