

# DataTrac3 CLI Documentation

```
DataTrac.exe --cli [--serial sn] [--download --port portNum][--export filename --last_day]
               [--upload --server username@server:path --pw password] [--help]
               [| more (> filename.log 2>&1)]
```

--cli	Use Command Line Interface
--serial sn	Provide serial number for device
--name name	Provide name for device
--download --port portName	Provide comm port for connection
--export filename	Provide file name to export to
--hide --dates start end	hide/show a given date range when exporting
--upload --server username@server:path --pw password	Upload to provided FTP server
--help	Display this help message

## 1. Overview

DataTrac3 ships with a Command Line version that can be used to download data, process data, export excel spreadsheets, and transfer excel documents over FTP to a specific server. All device configurations must be done through the graphical user interface.

DataTrac3 may be run from the command line with textual output by using the DataTracCLI.exe file found in the installation directory.

## 2. Arguments and Options

The arguments that can be passed to the command line version of DataTrac3 are shown at the top but will be listed below again with more information about their specific usage and implementation. These arguments must be passed into the program in the order that they are listed above.

--cli	This is a required argument. Without this, a graphical version of DataTrac3 will launch with textual output written into the console window.
--serial sn	This is an optional but recommended field. It should be used in place of the “name” argument in all possible situations. Either the “serial” or the “name” argument is required. This is the device serial number as listed in the configuration dialog of the graphical interface. This will point to a device to be manipulated as per flags set later.
--name name	This is an optional and not recommended field. It is included because there are situations where the device serial number cannot be used. If “serial” isn't included, “name” must be included if expect the command line interface to do any work whatsoever. This will point to a device to be manipulated as per flags set later.
--download	The command line tool will download whatever it finds from where ever it is pointed. If you are downloading directly from a device, either DataStation or Em50, command must be passed the “port” argument. If you are downloading data from a Decagon Data Service device, there are no further required arguments beyond its serial number.
--port portName	The command line tool will download device directly connected on this COM Port. This requires the “download” argument and a “serial” or “name”

argument.

- `--export filename` The command line tool will export the device information tied to the “serial” or “name” argument. This will export an Excel spreadsheet that is the same as a table exported by the graphical interface. This filename must have “.xls” attached to the filename being passed in or Windows Office may have trouble identifying the file for easy reading.
- `--last_day` The last day flag is optional and will only export the last 24 hours of logged data for the selected logger.
- `--dates start_date end_date` The `--dates` flag must be used in conjunction with the `--export` flag. There are several formats for the dates, however the most common are `dd/mmm/yyyy` or `“dd/mmm/yyyy HH:MM”`, if you use a time you MUST put quotes around the date/time combination.
- `--hide [DATES FLAG(required)]` The `--hide` flag MUST be used immediately before the `--dates` flag. And only in conjunction with the `dates` flag
- `--upload` Sets flag to upload generated Excel file to an FTP server of the users choosing.
- `--server username@server:path` Store exported Excel file on “server” at “path” as “username” where “username” exists on “server” and has permission to write at “path”
- `--pw password` This is the password required for user access to the FTP server passed in the “server” argument. This is required if there is a password on the FTP server, which is a good practice to have.
- `--help` Displays the text at the top of the documentation, information about how to use the command line interface.
- `| more (>filename.log 2>&1)` The “more” option is a redirect of the output. With only “| more” output is directed to the console. If you include the “>filename.log 2>&1”, which is optional, the output for the current execution is written to “filename.log”, which can be changed as needed. These are the default behaviors of DOS which are documented here for convenience. For more about file redirection, please see official DOS documentation.

### 3. Scheduling

You may schedule the DataTrac3 Command Line Interface, on Windows, through the use of a scheduler. A scheduler executes specific programs at specific times as configured by the user of the system. To do this, we recommend you save you commands and their arguments as a batch file to be executed by the windows shell scripting tools.

There are two main choices for a scheduler, Windows Task Scheduler and a freeware tool called System Scheduler available at this URL: <http://www.splinterware.com/products/wincron.htm>

Please use what you are most familiar with but Decagon recommends using the freeware System Scheduler because of its simplicity.

The general process for adding a task is:

- 1) Create a tested batch file
- 2) Open System Scheduler
- 3) Create new event
- 4) Configure times for event to activate
- 5) Point event at batch file
- 6) Wait till it executes to make sure it is working.

Once you have your scheduler running smoothly, you can now enjoy the easy flow of your data from DataTrac3 without further tampering. Please see below for some examples of the usage of the arguments and how to string them together to do interesting things.

### 4. Examples

NOTE: All of the below examples use the option “| more” to redirect output to the console. With this option, output can be redirect using further DOS commands. Without this option, output will continue to be directed to the log file that is generated by DataTrac 3 by default.

#### A) Em50G

This command will connect to the Decagon Data Service and download the new data for the selected Em50G Device for which its subscription has already been added to the Graphical Interface of DataTrac3.

```
DataTrac.exe --cli --serial 5GBETA07 -download | more
```

#### B) DataStation

These commands, executed in the order written will download all data from the DataStation DS1077. The two devices EMTEST01 and EMTEST02 must be reporting to the DataStation. They also must be configured in DataTrac3 or the data cannot be processed and exported. These exported files will have the new data downloaded from the DataStation executed from the first line of the batch file. It is recommended that scripting of the DataTrac Command Line Interface be done in a batch file for easy saving and manipulation.

```
DataTrac.exe --cli --serial DS1077 --download --port COM3 | more  
DataTrac.exe --cli --name EMTEST01 --export test1.xls | more  
DataTrac.exe --cli --name EMTEST02 --export test2.xls | more
```

#### C) Em50

This command will directly connect to an Em50, download data and export it to an excel file.

```
DataTrac.exe --cli --serial EM12345 --download --port COM1 --export EM12345.xls |  
more
```

#### D) Exporting Files

This command will export an Excel file created from the data EM12345 has stored in its DataTrac3 database.

```
DataTrac.exe --cli --serial EM12345 --export test1.xls | more
```

### E) Exporting Files With Date Limitation

This command will export specific date ranges to an Excel file created from the data EM12345 has stored in its DataTrac3 database.

- 1) Only include the dates between 15/mar/2013 00:00 and 22/mar/2013 00:00  
`DataTrac.exe --cli --serial EM12345 --dates 15/mar/2013 22/mar/2013 --export test1.xls | more`
- 2) Only include the dates between 15/mar/2013 5pm and 22/mar/2013 2pm (note the quotes that are required)  
`DataTrac.exe --cli --serial EM12345 --dates "15/mar/2013 17:00" "22/mar/2013 14:00" --export test1.xls | more`
- 3) Only include the dates **NOT** between 15/mar/2013 00:00 and 22/mar/2013 00:00  
`DataTrac.exe --cli --serial EM12345 --hide --dates 15/mar/2013 22/mar/2013 --export test1.xls | more`