

Brief description

Command Line Interface CLI for MSR Data Logger

Order number N10170

The MSR data loggers are configured and read out using the MSR standard PC software supplied or, in the case of the MSR175 product series, using the MSR175 PC software. Both software packages are only available for Windows PCs.

This fee based CLI software was developed for use with Linux or automated access via other software.

General

This software was developed in GO (<https://go.dev/>) and support many platforms. This software package includes:

- linux/amd64
- linux/arm64
- linux/arm-7
- windows/amd64

Further platforms can be created on request.

Notes

Windows:

The CLI software runs as a Command Line Programme. At begin, the interface driver from FTDI (<https://ftdichip.com/drivers/vcp-drivers/>) must be installed.

Supported Data Logger

- MSR145 from Firmware 6.18
- MSR145WxD from Firmware 2.18

Overview of functions

The currently implemented functions can be displayed in the console by calling the programme without parameters. A help text can be output for each function using the `-h` parameter.

```
Eingabeaufforderung
Microsoft Windows [Version 10.0.22631.3447]
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C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>msr-datalogger-cli.exe
NAME:
  msr-datalogger-cli - MSR Datalogger cli interface

USAGE:
  msr-datalogger-cli [global options] command [command options]

VERSION:
  v0.1 (8cf8279) (go1.22.2) (Tue May  7 10:36:56 CEST 2024)

COMMANDS:
  ports      List available serial ports
  list       List of available loggers
  info       Show information
  record     Record related commands
  values     Get realtime values
  format     Delete all records
  completion Generate completion stript

GLOBAL OPTIONS:
  --com value, -c value  COM-Port (default: "auto")
  --help, -h             Show this help
  --no-color             Disable color
  --no-progress-bar     Disable progress-bar
  --pretty               Try to prettify output
  --verbose, -v         Increase verbosity
  --version              Print the version and exit

CSV
  --csv-comma value      Field delimiter (default: ";")
  --csv-linefeed-only   Use only a linefeed character ('\n') as newline (Unix convention)
  --csv-no-comments     Do not add some descriptive comments on to of the file
  --csv-rel-times        Use relative time (offset from first data point) in seconds

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C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>
```

List

The connected data loggers are listed.

```
Eingabeaufforderung
C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>msr-datalogger-cli.exe list
Port Type      Serial Number  Software Number  Firmware Version
COM3  MSR145wXd    SN556100        26135            2.56

C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>
```

Record list

All records of a data logger are listed.

```

C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>msr-datalogger-cli.exe record list
Index Start time Pages
0 Mon, 06 May 2024 17:55:47 CEST 5
1 Fri, 15 Mar 2024 14:05:37 CET 1
2 Sat, 17 Feb 2024 18:01:30 CET 8186

C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>msr-datalogger-cli.exe -c=COM3 record list
Index Start time Pages
0 Mon, 06 May 2024 17:55:47 CEST 5
1 Fri, 15 Mar 2024 14:05:37 CET 1
2 Sat, 17 Feb 2024 18:01:30 CET 8186

C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>
  
```

Note: If more than one data logger are connected at the same time, the desired data logger is selected via the COM port (e.g. – c=COM3)

Record get

Read out individual record. In the example here shown, the last (most recent) record is read out and a CSV file is created for each channel.

```

C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>msr-datalogger-cli.exe record get --format=csv 0
done _____ 100 %

C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>
  
```

Create CSV file MSR145wXd-SN556100-20240506_155547-Ch00.csv:

```

MSR145wXd-SN556100-20240506_155547-Ch00.csv
1 # Channel number: 0
2 # Channel name: Ax
3 # Channel unit: g
4 # Start time: 2024-05-06 15:55:47.000
5
6 Date;Ax [g]
7 2024-05-06 15:55:47.000;-0.935989
8 2024-05-06 15:55:48.000;-0.935989
9 2024-05-06 15:55:49.000;-0.935989
10 2024-05-06 15:55:50.000;-0.935989
11 2024-05-06 15:55:51.000;-0.931992
12 2024-05-06 15:55:52.000;-0.935989
13 2024-05-06 15:55:53.000;-0.931992
14 2024-05-06 15:55:54.000;-0.939987
15 2024-05-06 15:55:55.000;-0.935989
16 2024-05-06 15:55:56.000;-0.939987
17 2024-05-06 15:55:57.000;-0.935989
18 2024-05-06 15:55:58.000;-0.931992
19 2024-05-06 15:55:59.000;-0.931992
20 2024-05-06 15:56:00.000;-0.935989
21 2024-05-06 15:56:01.000;-0.931992
22 2024-05-06 15:56:02.000;-0.931992
23 2024-05-06 15:56:03.000;-0.935989
  
```

Record config get / set

The record configuration previously created with the standard software can be saved in a file (e.g. cfg.txt) and loaded back into the logger at a later date.

```
Eingabeaufforderung
C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>msr-datalogger-cli.exe record config get -o=cfg.txt
C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>msr-datalogger-cli.exe record config set cfg.txt
C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>
```

Record start / stop

The data record can be started or stopped. Depending on the type of data logger, the record configuration can be defined in advance.

```
Eingabeaufforderung
C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>msr-datalogger-cli.exe record start
true
0: ok
C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>msr-datalogger-cli.exe record stop
C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>
```

Values

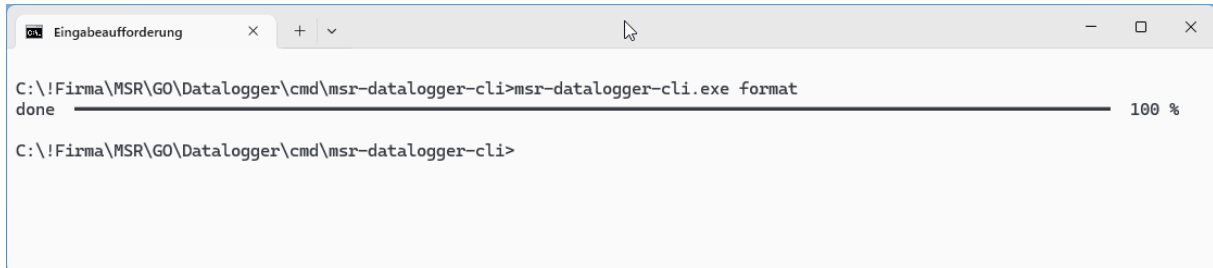
The current measured values of all available channels are displayed.

```
Eingabeaufforderung
C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>msr-datalogger-cli.exe values 1
Time Name Unit Value Info
12:17:28 Ax g -0.956 0
12:17:28 Ay g 0.004 0
12:17:28 Az g -0.040 0
12:17:28 H2 %rH 40.902 0
12:17:28 TH2 °C 27.915 0
12:17:28 X-1 0.000 0
12:17:28 X-2 0.000 0
12:17:28 X-3 0.000 0
12:17:28 X-4 0.000 0
12:17:28 X-5 0.000 0
12:17:28 X-6 0.000 0
12:17:28 X-7 0.000 0
12:17:28 X-8 0.000 0
12:17:28 BAT V 4.268 0
C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>
```

Format

With format the entire record on the memory is deleted.

Caution: This process can take several minutes. Please do not interrupted!



```
Eingabeaufforderung
C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>msr-datalogger-cli.exe format
done 100 %
C:\!Firma\MSR\GO\DataLogger\cmd\msr-datalogger-cli>
```