

NAME

kaco2mqttd – Transfer KACO inverter data to MQTT daemon

SYNOPSIS

kaco2mqttd [options]

DESCRIPTION

kaco2mqttd is a UNIX system daemon to read operational parameters of KACO inverters. For further processing this data is send to a MQTT server.

At startup, the program reads the system-wide configuration file **kaco2mqttd.conf**. This is a text file, whose structure and content are explained more in detail in manual page **kaco2mqttd.conf** (5).

As the operating parameters of the KACO inverters are transmitted via a serial interface (USB, RS485), it is important that the authorization for **kaco2mqttd** is properly setup for the respective device. To do this, the **kaco2mqttd** is operated with a corresponding group authorization (usually "dialout"). More details on this can be found in the manual **kaco2mqttd.conf** (5).

Supported are currently all models of the inverser series "00" and "02":

Inverter series	Produkt name
00	Powador 2500xi ... 8000xi Powador 4000 supreme ... 8000 supreme Powador 3200 ... 9600 Powador 5300 supreme ... 9600 supreme blueplanet 6400xi supreme/7600xi supreme
02	Powador 1501xi ... 5001xi Powador 2002 ... 6002 blueplanet 1501xi/2901xi/3601xi blueplanet 1502xi ... 5002xi

OPTIONS

Currently this program does not support any options.

NOTES**Getting started**

The **kaco2mqttd** adheres to the conventions of the Filesystem Hierarchy standard (FHS, <http://www.pathname.com/fhs/>). For further and special configuration options of *System services*, please refer to the documentation of your operating system. The following information provides generally applicable configuration instructions.

After installing the program or the program package, first adjust the the settings in the configuration file *kaco2mqttd.conf* according to your inverter and MQTT network configuration. This file is located at the system-wide configuration directory (*/etc*). To accomplish this task you need administration rights.

As soon as the customized configuration file is available, the daemon can be started. Under a system working with *systemd*, the following command is used:

```
systemctl start kaco2mqttd.service
```

For a system that still works with the older *init* system, the following command applies:

```
/etc/init.d/kaco2mqttd start
```

If the *kaco2mqttd* daemon is already running, it must first be stopped to read in the new configuration. The daemon is stopped in the same way as it is started with the following command:

```
systemctl stop kaco2mqttd.service
```

Respectively for *init* systems with:

```
/etc/init.d/kaco2mqttd stop
```

Alternatively, *kaco2mqttd* daemon can also read in a modified configuration file during operation, i.e. without a general restart. The following command is used for this purpose:

```
systemctl restart kaco2mqtt.service
```

Respectively for *init* systems with:

```
/etc/init.d/kaco2mqtt reload
```

In this variant, the daemon first closes the existing connections to the serial interface and the MQTT server and then reopens them with the new configuration parameters.

Debugging

To track errors at startup or during operation, you can use the log file of the syslog system service `/var/log/syslog`. The messages can be monitored with administration rights, for example in a terminal window with the following command:

```
tail -f /var/log/syslog
```

The `kaco2mqtt` daemon logs both informative messages and special errors that may occur, particularly at startup. These can be helpful when searching for misconfigurations.

Hardware wiring

The inverters are usually connected via one of the inexpensive USB-RS485 adapters. When connecting this adapter to the RS485 interface of the inverter, care must be taken to ensure correct wiring. The USB-RS485 adapters provide two contacts A+ and B- (possibly depending on the model) where polarity may differ from the A/B labeling on the inverter. This is also indicated in the KACO operating instructions. On the inverter, this applies to connections A (DATA-) and B (DATA+). The wiring must therefore be carried out as follows:

Inverter	USB-RS485-Adapter
A (DATA-)	B-
B (DATA+)	A+

SEE ALSO

`kaco2mqtt.conf` (5)

BUGS

Please forward bug reports and suggestions for improvements via the project page to the developers:

<https://sourceforge.net/projects/kaco2mqtt/>

AUTHORS

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