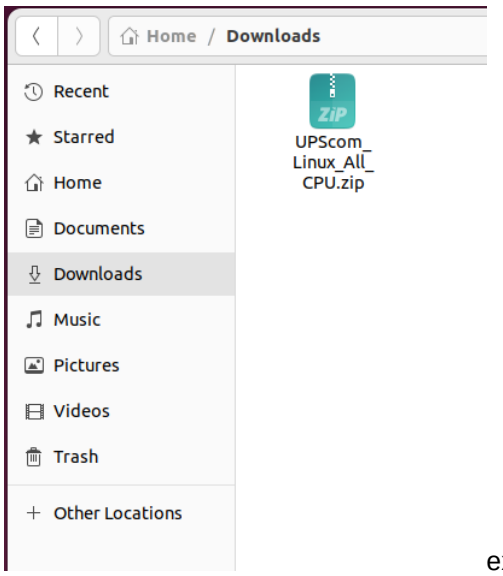
Quick installation guide for UPScom

UPSI-2406DP1 in connection with UPScom V1.0.0.1 under **Ubuntu 22.04.3 LTS**

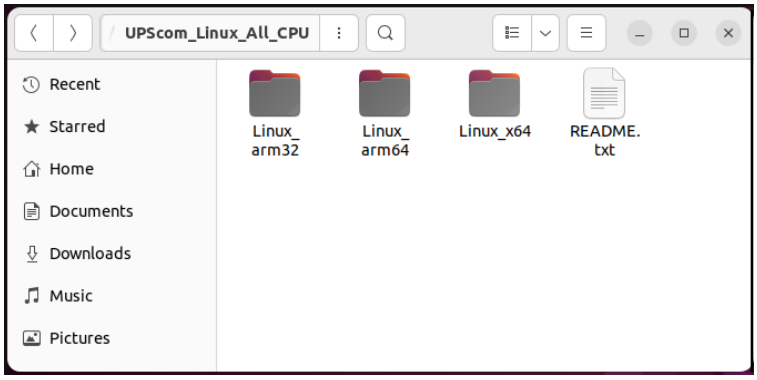
Linux knowledge is required. Please pay attention to upper- and lower-case letters.

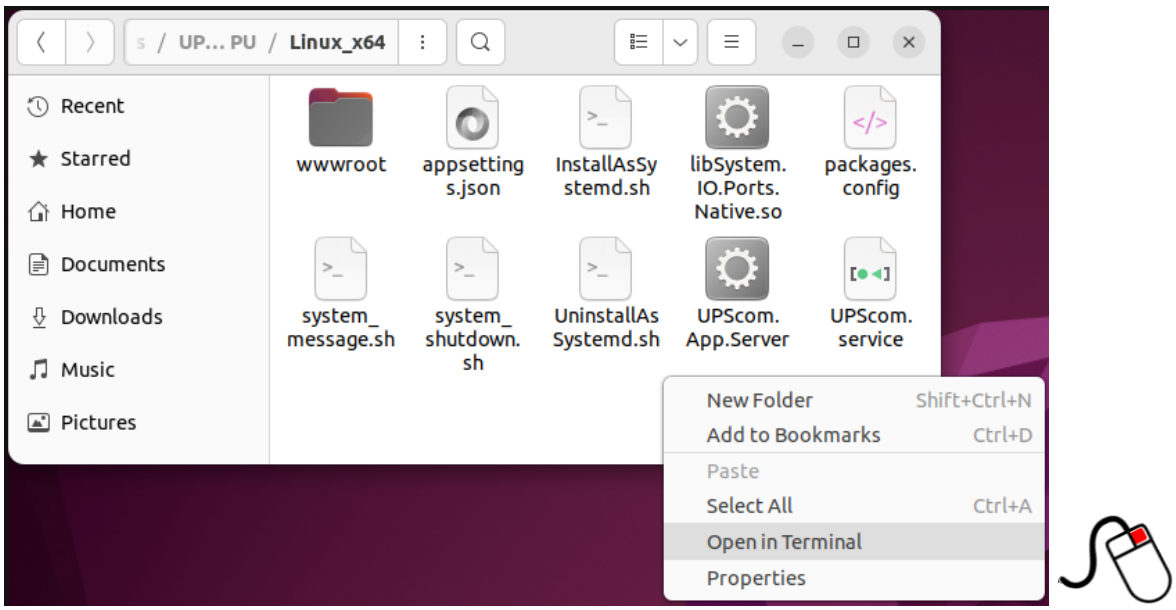
Download UPScom software here.

Extract the file and select the required processor architecture.



extract





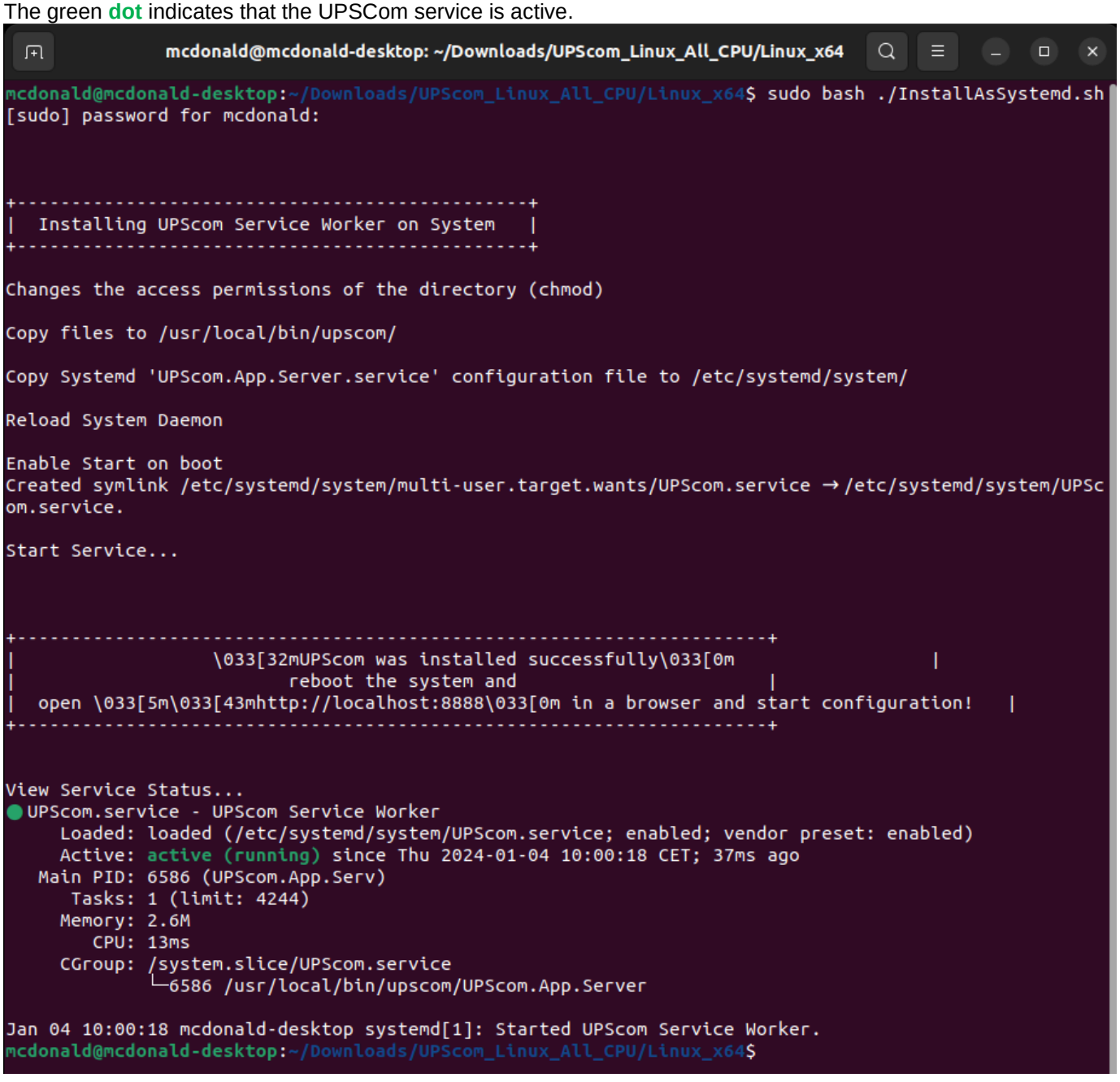
Right-click on the folder and select **'Open in Terminal'** from the context menu.

Installation: Bash script

Execute installation.
YourUsername@yourMachine:~your-directory/linux$ **sudo bash ./InstallAsSytemd.sh**
[sudo] password for YourUsername: enter password

The script copies files to the '/usr/local/bin/upscom' folder and creates systemd entries to automatically start UPScom on every system boot.

The green **dot** indicates that the UPSCom service is active.



The software can be started without 'root' rights. It must be ensured that the logged-in user has the necessary privileges to access the serial ports or is a member of the Linux 'dialout' group.

To add a user to the 'dialout' group, type the following in a Linux terminal →
sudo adduser 'user_that_want_port_access' dialout

To start the program without installation, open a terminal and navigate to the folder where UPScom is copied. Launch the app with 'sudo ./UPScom.App.Server'. The terminal screen will display some log information.

UPSCom service

Navigate to the UPScom folder by going via File explorer “Files” →Other Locations →Computer → (folder) usr/local/bin/**upscom** and open a terminal (Strg+Alt+T).

Check the status UPScom.service→ sudo systemctl status UPScom

Stop the UPScom.service → sudo systemctl stop UPScom

Start the UPScom.service → sudo systemctl start UPScom

View journal log entries:→ sudo journalctl -u UPScom

COM port

To set a specific COM port in UPScom.Config.json, go to the **UPScom** folder via File explorer “Files” →Other Locations →Computer →(folder) usr/local/bin/**upscom** and open a terminal (Strg+Alt+T).
Open file via nano editor → sudo nano UPSCom.Service.Configuration.json

"DevicePort": "/dev/ttyS0" → S0 means COM Port 1
"DevicePort": "/Auto" → for USB connection

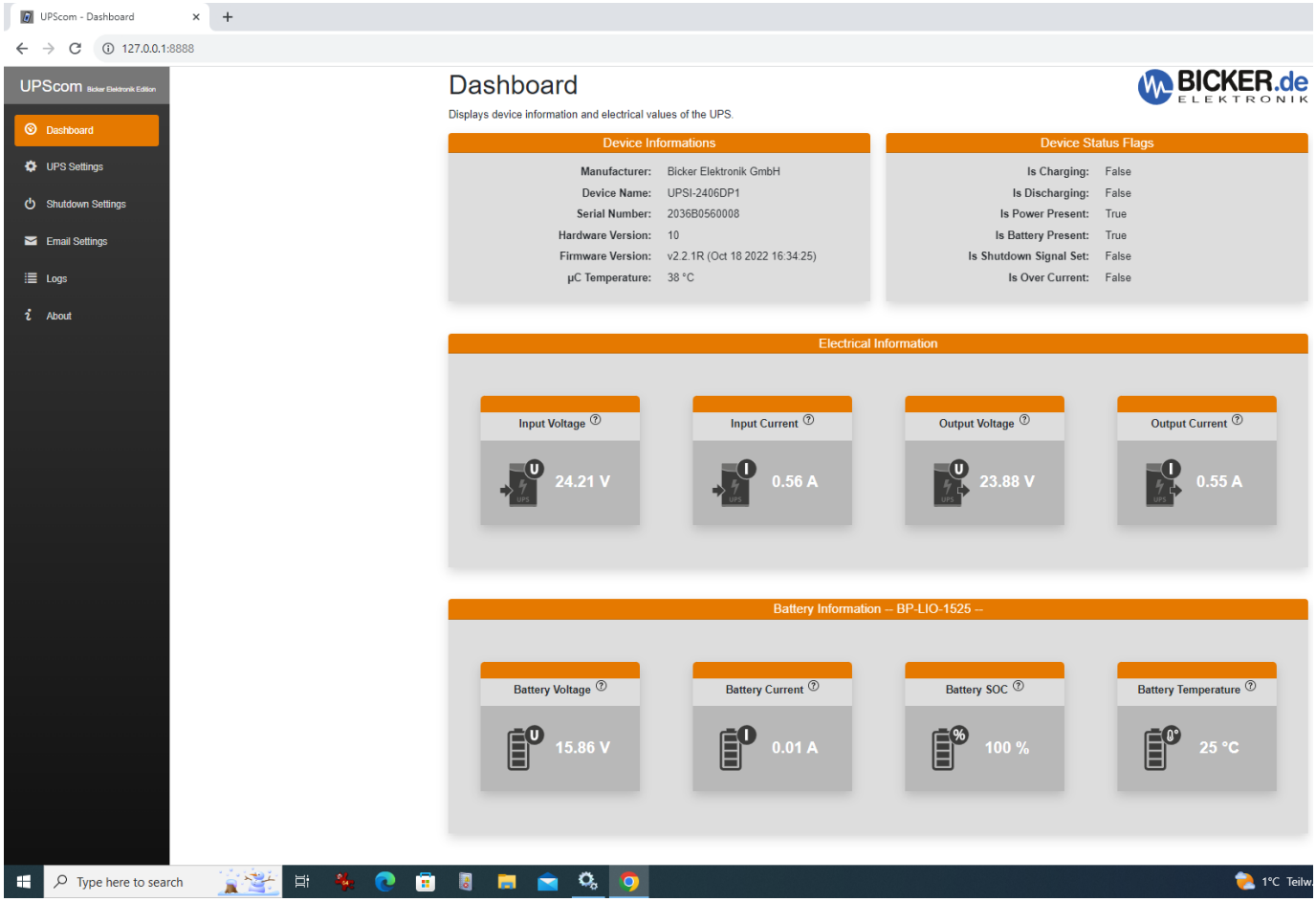
Save the file.

Communication problems
PC systems with ASRock mainboards may have problems with UPS communication via USB or COM port.
If you would like to use COM port under Linux OS, please boot into BIOS to set COM port IRQ Moder to [Linux].
If you would like to use COM port under Win OS, please boot into BIOS to set COM port IRQ Moder to [Windows].
Path: BIOS >Advanced >Super IO configuration >COM Port IRQ Mode → [Linux] or [Windows].

User interface

To access the user interface, open your web browser and enter → 127.0.0.1:8888 or localhost:8888

Dashboard



Device Information

Manufacturer: Bicker Elektronik GmbH

Device Name: The connected UPS → UPSI-2406DP1 or another model from Bicker Elektronik GmbH will be displayed. For DC2412-12UPSx or UPSIC-xxxx series → UPSIC Series will be shown.

Serial number/ Hardware Version/ Firmware Version/ µC Temperature from Device will be shown.

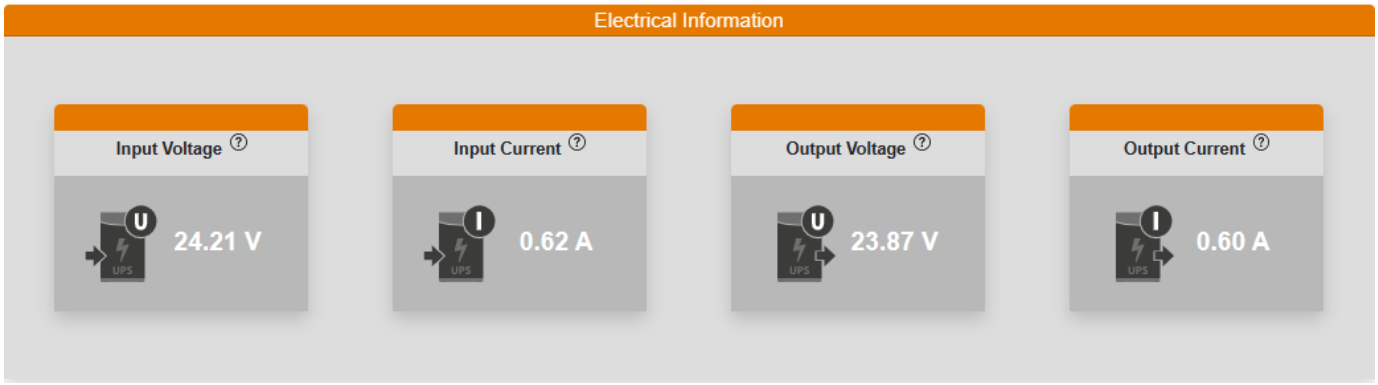
Device Status Flags

Show information via “False” and “True”

Is Charging	False: Energy storage will not be charged.	True: Energy storage will be charged.
Is Discharging	False: Energy storage will not be discharged.	True: Energy storage will be discharged.
Is Power present	True: UPS will be powered from source.	False: DC in or source fail.
Is Battery Present	True: Battery is connected.	False: Battery is disconnected.
Is Shutdown Signal set	True: Shutdown signal set.	False: Shutdown Signal not set.
Is Over Current	False: no over current at output.	True: Overcurrent at output.

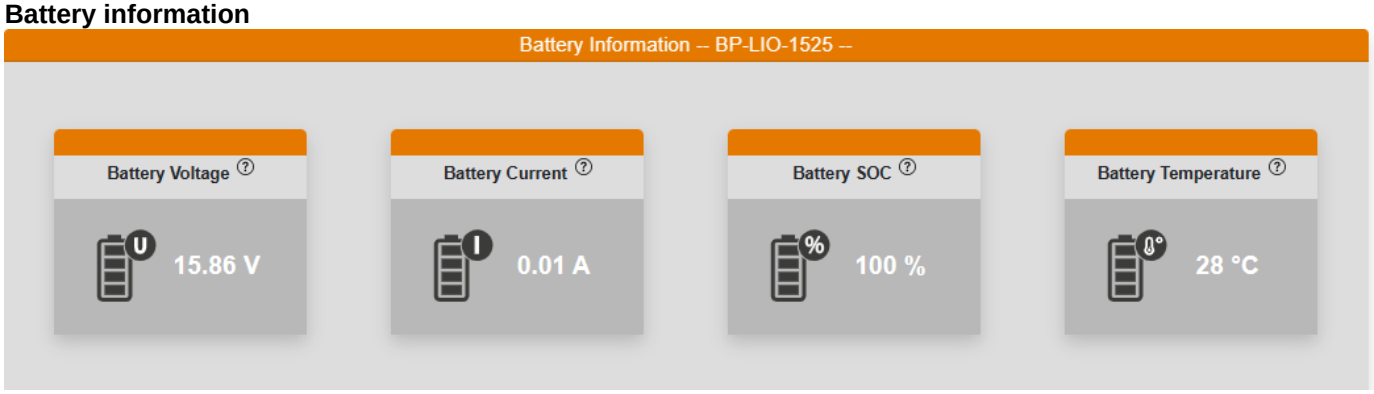
Electrical information

Display voltage and current for input and output.



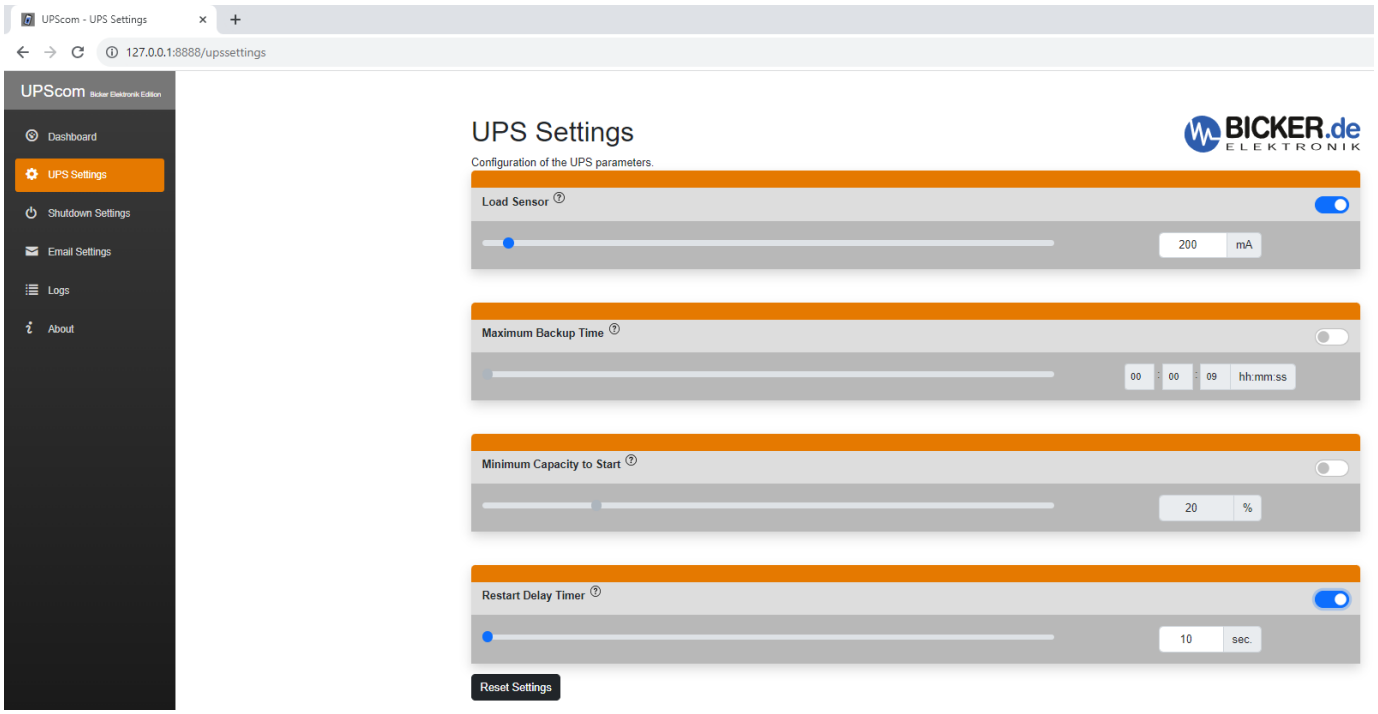
Input Voltage: Shows the actual input voltage of the UPS.
Input current: Shows the actual input current of the UPS.
Output voltage: Shows the actual output voltage of the UPS.
Output current: Shows the actual output current of the UPS.

Battery information



Battery Voltage: Shows the actual battery voltage of the battery or energy storage.
Battery Current: Shows the actual battery current of the battery or energy storage. A negative value indicates discharge.
Battery SOC: Shows the actual **S**tate **o**f **C**harge of the battery or energy storage.
Battery Temperature: Shows the actual battery temperature.

UPS Settings



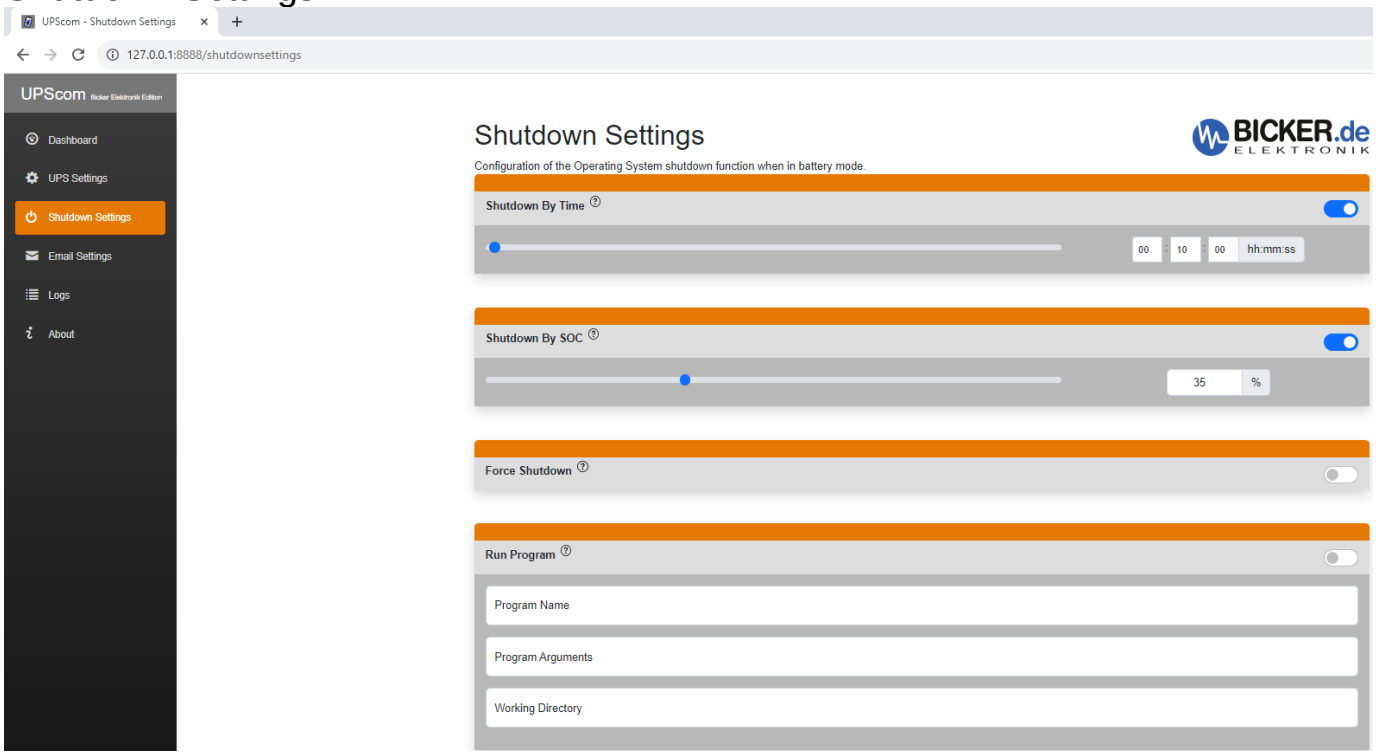
Load Sensor
When enabled, the load sensor will switch off the UPS when DC input fails, and the load falls below the set value from the load sensor.
Example:
If a PC is connected to the output of the UPS, the load sensor must be adjusted below the **IDLE power** and above the **Off-mode** power of the PC.
If your PC consumes 3A in **IDLE Mode** and 0.1A in **Off mode** the load sensor must be set higher than 0.1A.
If a USB or RS232 Interface is connected, additional settings under “Shutdown Settings” are required.

Maximum Backup Time
When enabled, it will switch of connected load after the set time. This is used for systems without an RS232 or USB interface.

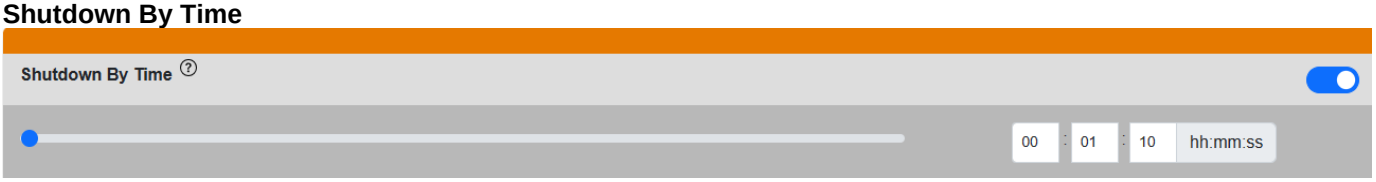
Minimum Capacity to Start
When enabled, it will enable the output of the UPS at x% SOC. It is recommended for use with UPS systems with ultra caps as energy storage. During the initial switch-on of the UPS, super caps must be charged first to supply energy in UPS mode.

Restart Delay Timer
When enabled, it will reboot a PC system if power comes back during the shutdown of the OS, such as Windows. The “Restart Delay Timer” switches off the output of the UPS for the set time. After this time, the output of the UPS will be switched on again, and the PC will restart (maybe BIOS settings needed).

Shutdown Settings



Shutdown By Time



When enabled and the UPS is in battery mode, the operating system shuts down when the set time has elapsed. An interface connection via USB or RS232 is needed.

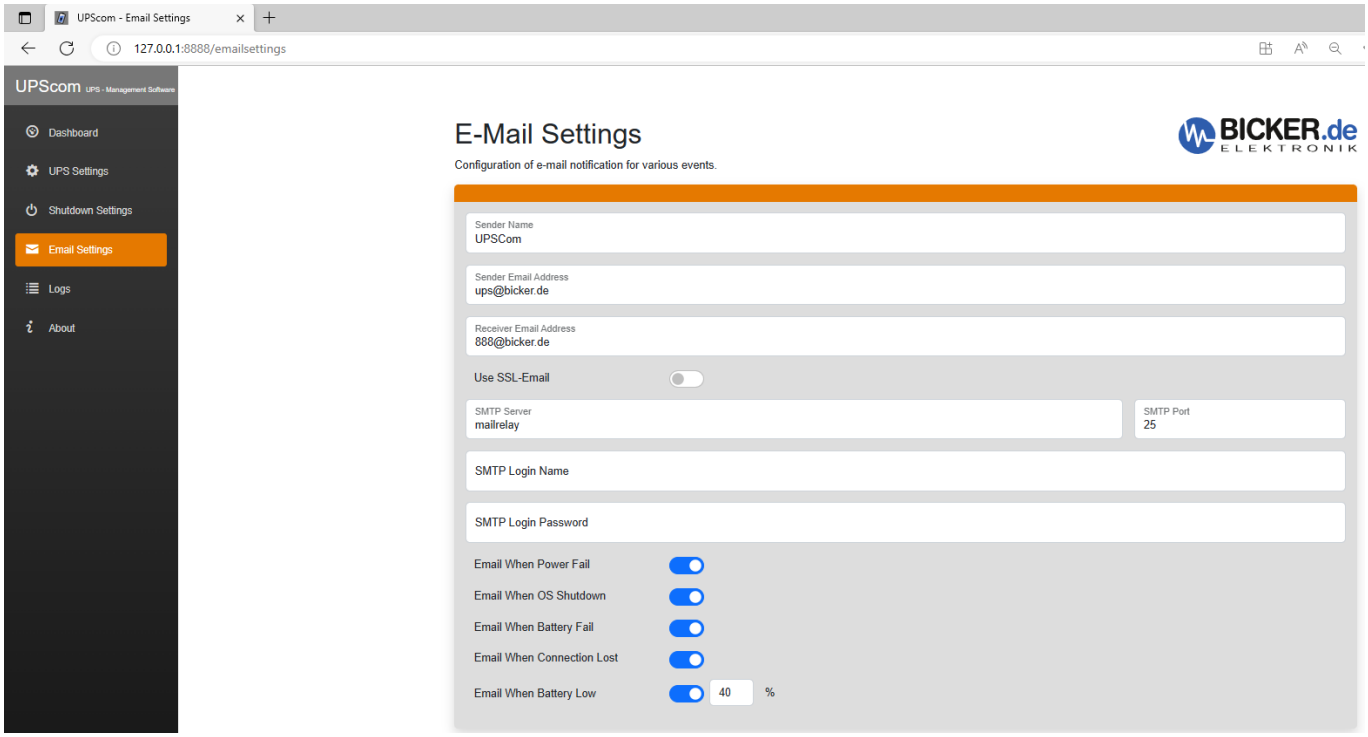
Shutdown By SOC

When enabled and the UPS is in battery mode, the operating system shuts down when the set SOC (State of Charge) of energy storage has elapsed. An interface connection via USB or RS232 is needed.

Force Shutdown

When enabled, open programs that do not close themselves during shutdown will be hard terminated.

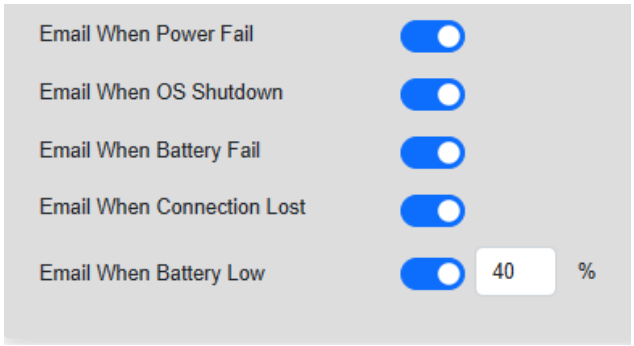
E Mail Settings



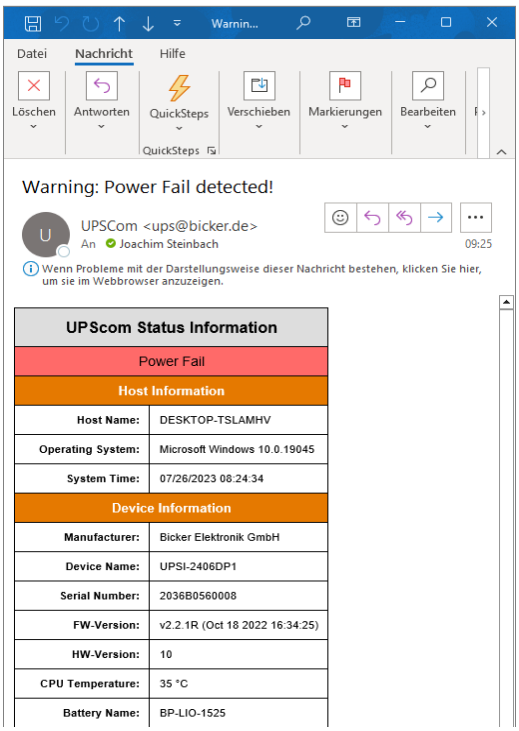
Please contact your admin for the Email settings.

The settings can differ based on whether you have your own PC with an Email server program or an email server in the cloud.
If you have an Email server in the cloud, the “Sender Email Address”, “Recipient Email Address” and “SMTP Login Name” could be the same.

Email message
A warning message will be sent when enabled in UPSCom Email settings.

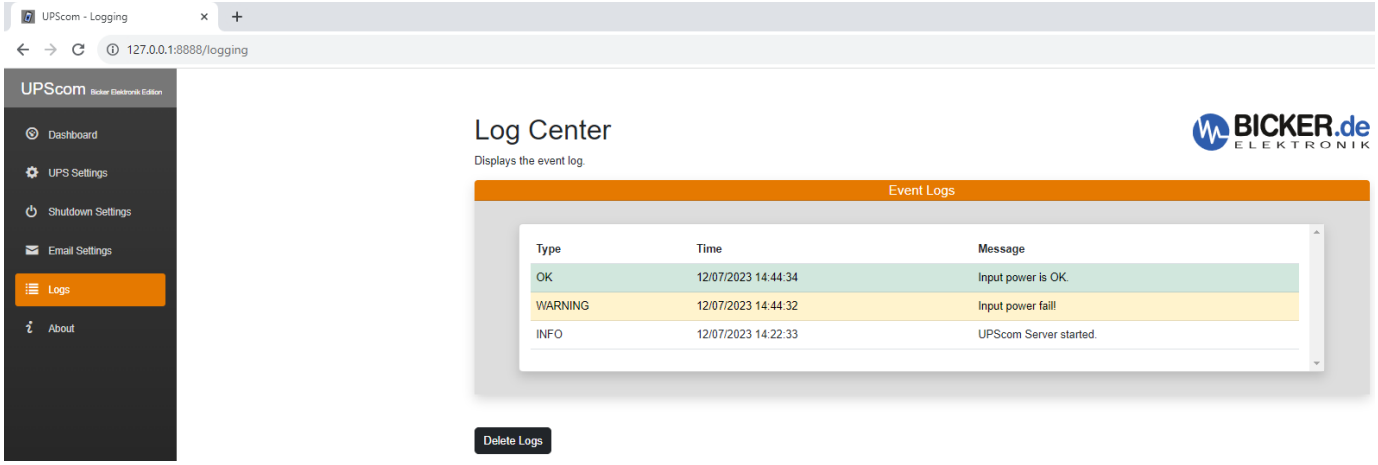


If DC input fails, you will receive a warning message via email: "Warning: Power failure detected."



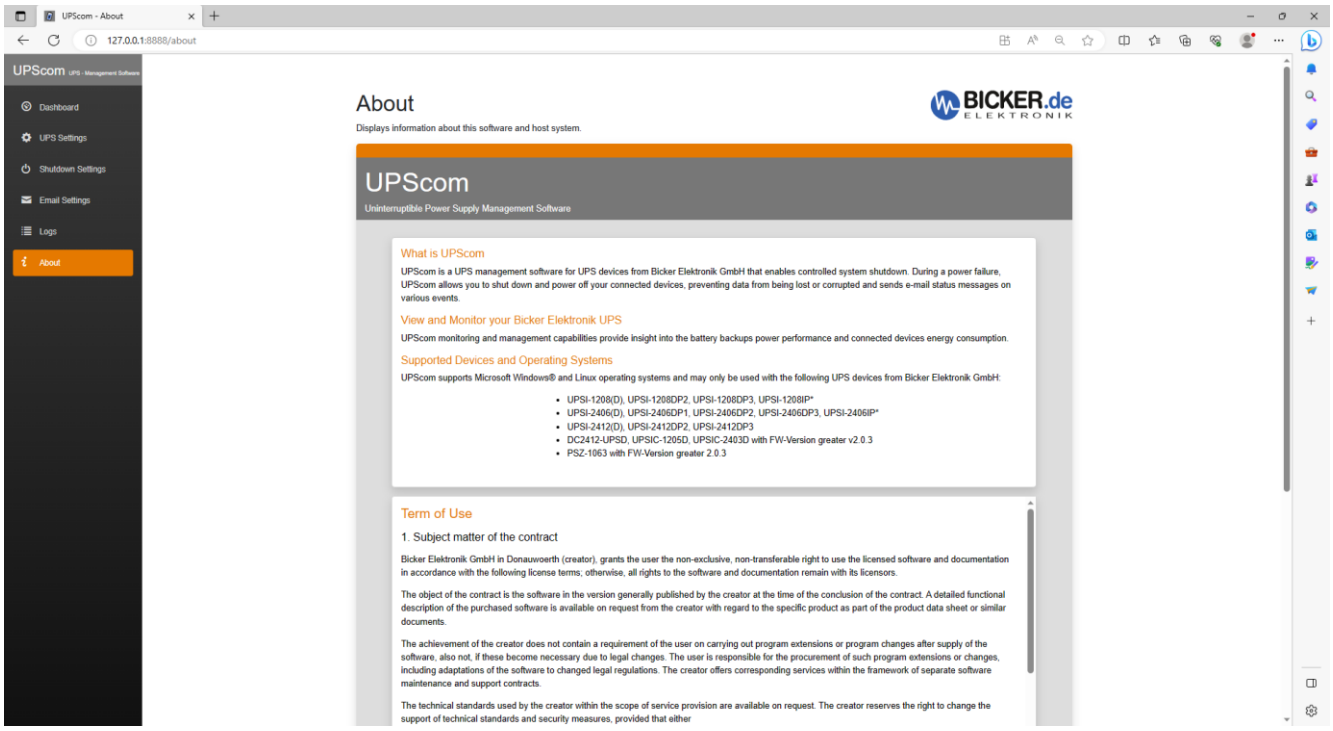
Emails regarding battery failure will be sent only for UPS units with external batteries!

Logs



Events will be displayed in the Log Center.

About



Information about term of use, etc...

Tips and tricks, knows problems.

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Path: BIOS >Advanced >Super IO configuration >COM Port IRQ Mode → [Linux] or [Windows].

RS232 connection
A DSUB9 1:1 cable without twist between UPS and PC is required.

Change IP address and port for Remote Access via WEB browser
Open UPScom.Config.json at UPScom folder with an editor. Write down “IP address and port” behind “TCPPort”: and click save.

```
{
  "ServerSettings": {
    "TCPPort": "AllowAllIncomingIp:8888"
```