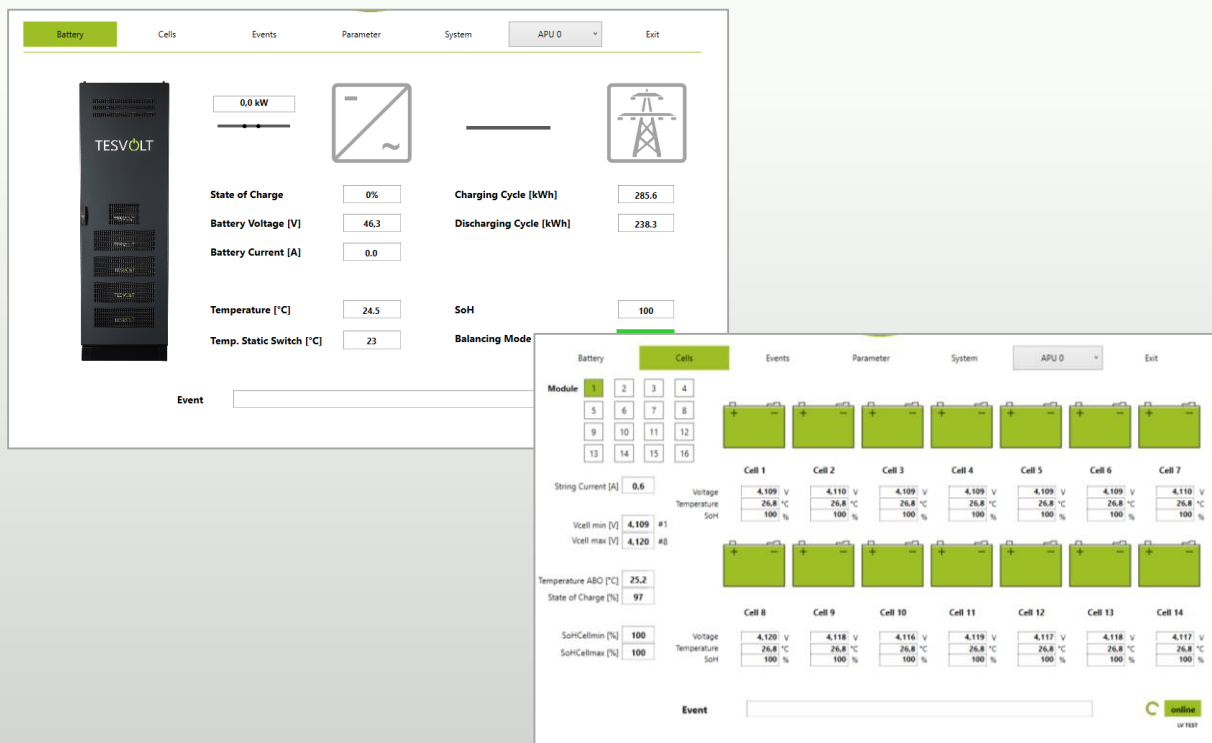


# Diagnostic Studio 1.1



- ✓ Intelligent Battery-Management and Monitoring APP for safety and outstanding life cycle performance
- ✓ Interface to the Stercom Battery Management in combination with „Active Charge Transfer Balancing“ (ACT) or „Dynamic Cell Balancing“ (DCB) for optimized protection and safety for almost every cell technology
- ✓ Event Logging and also Chart Logging for efficient Diagnosis and Trouble Shooting
- ✓ Variable interfaces to many energy management systems and chargers
- ✓ Firmware Download to the BMS
- ✓ System Monitoring down to each individual cell

# Diagnostic Studio

## Advantages

- ✓ Simple and Clear visualization and Diagnostic of the Energy Storage Systems
- ✓ Different authorization modes: Engineering, Installer and User
- ✓ System overview with Interfaces to the ESS; Chargers and Energy Management Systems
- ✓ String, Module and Cell information on SoC, SoH, Temperature, Balancing and many more relevant information
- ✓ Automated Firmware Update via the Master BMS for the Master and all Slave Strings
- ✓ Event Logging for optimized Battery Monitoring and Trouble-Shooting
- ✓ Data Logging for deeper analysis
- ✓ Trigger of Self Test Functions like Capacity Test, Balancing Test, ESR Test, etc
- ✓ PC Installer for Windows 10

## System Overview

System Overview interface showing battery status metrics:

- Power: 0.0 kW
- State of Charge: 0%
- Battery Voltage [V]: 46.3
- Battery Current [A]: 0.0
- Temperature [°C]: 24.5
- Temp. Static Switch [°C]: 23
- Charging Cycle [kWh]: 285.6
- Discharging Cycle [kWh]: 238.3
- SoH: 100
- Balancing Mode: OK

## Events

Events interface showing a list of system events:

#	Event	Cell	Detail	Date / Time	Type
261	W938 - Cell Low Voltage	104	3.10 V	2018.07.19 11:52:43	🟢
260	W938 - Cell Low Voltage	113	3.23 V	2018.07.19 11:35:35	🟡
259	I110 - Precharge	0		2018.07.19 09:48:03	🟢
258	E102 - Reset	70	70	2018.07.19 09:47:52	🟢
257	E102 - Reset	36	36	2018.07.19 09:47:52	🟢
256	I110 - Precharge	0		2018.07.18 13:40:33	🟢
255	E102 - Reset	70	70	2018.07.18 13:40:22	🟢
254	E102 - Reset	36	36	2018.07.18 13:40:22	🟢
253	I110 - Precharge	0		2018.07.18 13:39:10	🟢
252	E102 - Reset	14	14	2018.07.18 13:38:59	🟢
251	I110 - Precharge	0		1984.01.01 00:00:11	🟢
250	E102 - Reset	8500	8500	1984.01.01 00:00:00	🟢
249	E102 - Reset	36	36	1984.01.01 00:00:00	🟢
248	I110 - Precharge	0		1984.01.01 00:00:11	🟢

## String Modules and Cell Status

String Modules and Cell Status interface showing detailed cell data:

- String Current [A]: 0.6
- Temperature ABO [°C]: 25.2
- State of Charge [%]: 97
- SoHCellmin [%]: 100
- SoHCellmax [%]: 100

Cell	Voltage	Temperature	SoH
Cell 1	4.109 V	26.8 °C	100 %
Cell 2	4.110 V	26.8 °C	100 %
Cell 3	4.109 V	26.8 °C	100 %
Cell 4	4.109 V	26.8 °C	100 %
Cell 5	4.109 V	26.8 °C	100 %
Cell 6	4.109 V	26.8 °C	100 %
Cell 7	4.110 V	26.8 °C	100 %
Cell 8	4.120 V	26.8 °C	100 %
Cell 9	4.118 V	26.8 °C	100 %
Cell 10	4.116 V	26.8 °C	100 %
Cell 11	4.119 V	26.8 °C	100 %
Cell 12	4.117 V	26.8 °C	100 %
Cell 13	4.118 V	26.8 °C	100 %
Cell 14	4.117 V	26.8 °C	100 %

## System Status and Commands

System Status and Commands interface showing error/warning status:

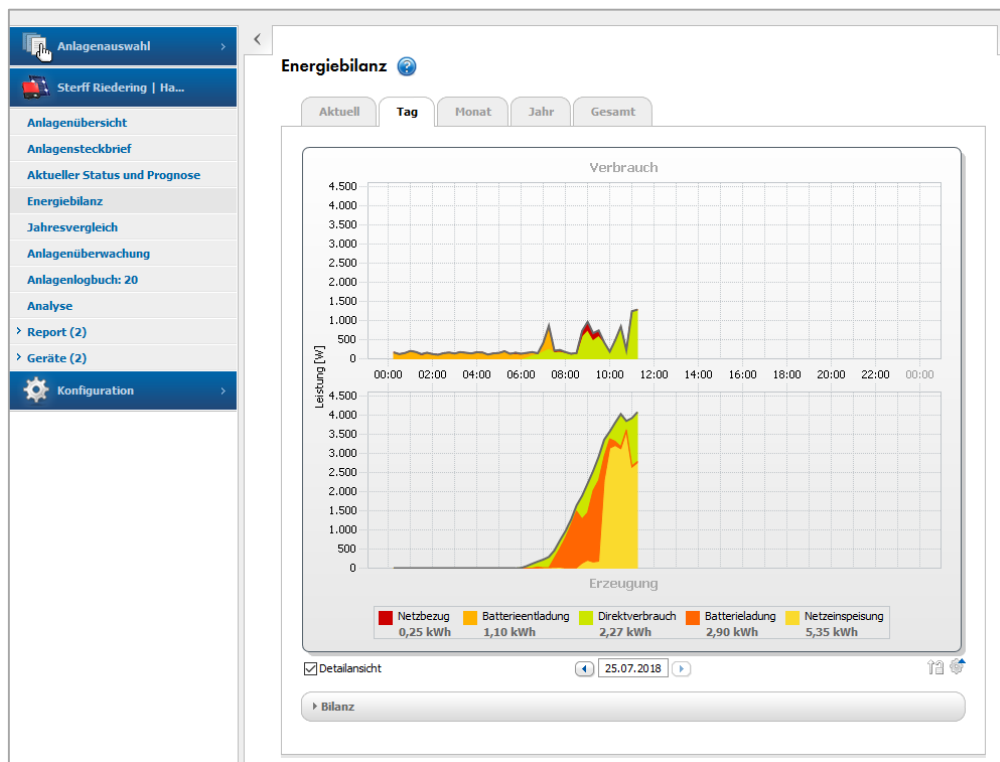
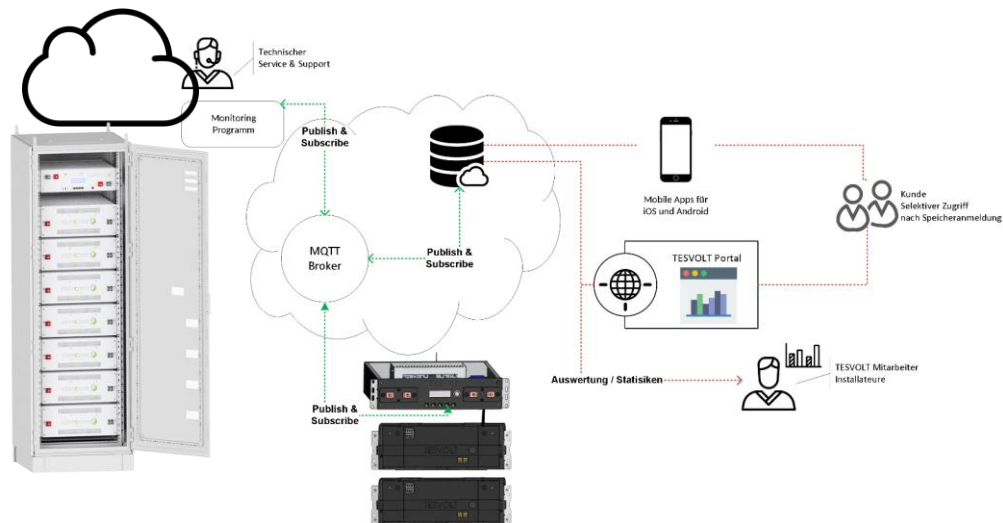
Error / Warning	Status
Battery High Voltage	🟢
Battery Low Voltage	🟢
Battery High Temperature	🟢
Battery High Current	🟢
BMC Failure	🟢

Buttons: Expert Level, Start Logging, Firmware Download, Communication Port, Version 3.3.1.0

# Stercom „Diagnostic Studio“

## Portal

- ✓ Communication from the Stercom Controller via a MQTT broker directly into the cloud
- ✓ Central database in a cloud server to collect and store all relevant data of each system
- ✓ Bidirectional access from and to the client
- ✓ Enhanced and direct access for qualified Service Personal down to cell level
- ✓ Customer Access with Browser based APP via Smart Phone or PC to monitor and store important storage performance data



## Contact



### Software Controls and Tools

Stersoft GmbH

A Stercom Power Solutions GmbH Company

Ziegelstraße 1

D-83629 Weyarn

Telefon: +49 (0) 8020 90 86 68 0

Email: [info@stersoft.de](mailto:info@stersoft.de)  
Website: [www.stersoft.de](http://www.stersoft.de)