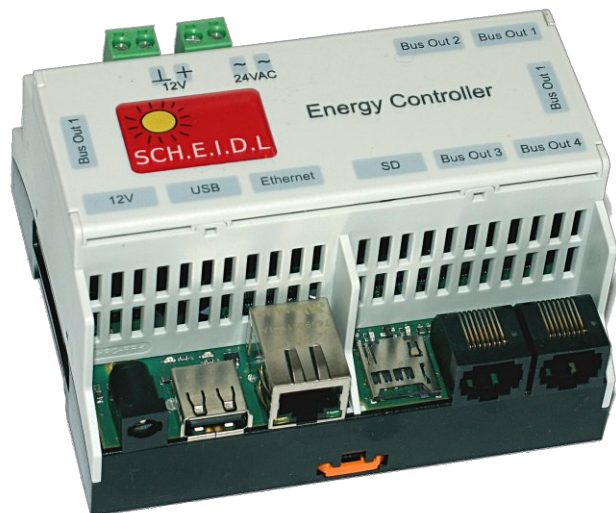


# Energy Controller Datasheet Multi-Datalogger

Web-Monitoring of Environmental, Thermal and Electrical Input



The SCH.E.I.D.L Energy Controller as Multi-Datalogger is a powerful measuring platform to monitor all types of building, storage, garden as well as systems for heating or electrical energy.

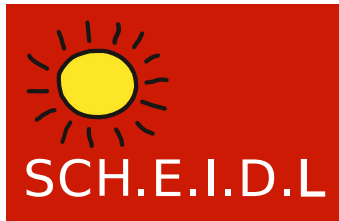
Various types of sensors are available and can be connected wireless or cable connected.

The operation and visualization of the entire system is easily reached from the network and PC in standard browsers, even on tablet or smartphone.

In addition to running as a data-logger there are also steering controllers available for various applications.

## Operation and Use

- To monitor environmental conditions within buildings or outdoor, e.g. museum, classic car or food storage, garden center or IT
- To analyze thermal and electrical systems with several heat generators or consumers, e.g. solar heat, cogeneration, photovoltaics, heat pumps, boilers, or heat distribution
- Visualization of multiple temperatures, humidity, power meters, trends, conditions and hot water tanks, by a lot of sensors
- Connectivity to industrial standard 0-10V/2-10V or 0-20mA/4-20mA sensors
- Long term recording (monitoring) for several seasons including a data backup
- Web remote access without installing any software, sending alarms in case of any problems via email or SMS
- All Data is stored inside the device, no data is sent to a cloud or portal server
- Security is ensured on military standard by several protected access levels
- Easy extension of new wireless and wired sensors just by hot-plugging
- Support of industry standard, wireless protocol for a mesh-network of sensors. Messages can be forwarded to span several 100m distance
- Support of cable based busses for maintenance free and fast sensors. This reduce cabling costs to a minimum, everything is just plugged
- Installation of Internet access just by plugging into a router - no configuration
- For snapping on DIN rails, housing for flat electrical cabinets
- Version 3.5: support wireless sensors
- EAN number: 4 260376 260019  
Starter-Kit: 4 260376 260200



# Energy Controller Datasheet Multi-Datalogger

Web-Monitoring of Environmental, Thermal and Electrical Input

## Supported Sensors

### Multisensor

- Secure SES303  
EAN:5 015914 840098
- Philio 3-in-1 PAT02-A  
Part number: 4713698571115
- Philio 3-in-1 PAT02-B  
\*Outdoor with special housing  
Part number: 4713698571467
- POPP Mold Detector  
Part number: 4251295701202
- Fibaro RGBW-442  
\*Quad 0-10V Input, no output  
Part number: 5902701701581
- Fibaro Smart Impkant RGBS-222  
\*0-10V Input, binary input, DS18B20,  
DHT22, no output  
Part number: 5902701701475

### Temperature

- Secure SES302  
Part number: 5015914840081
- Philio PST02-1C  
Part number: 4713698570187 and  
Part number: 4016139099378
- SCH.E.I.D.L V2A-Tempsensor  
Part number: 4260376260026
- SCH.E.I.D.L Buffer-Tempsens  
Part number: 4260376260071

### Meter

- Qubino 3-Phase Smart Meter  
Part number: 3830062070683

- Aeotec HEM clamp-on  
1 phase 60A: 1 220000 014381  
3 phase 100A: 1 220000 015616  
3 phase 200A: 1 220000 015531
- devolo Home Control Wall Plug 2.0  
Part number: 4250059699144
- Aeotec Nano Switch ZW116  
Part number: 1220000015333
- SCH.E.I.D.L S0 Counter Adapter  
Cabled 1-Wire  
S0 pulse input DIN 43864  
Weighted pulses for electricity, natural-  
gas, water, heat or other meters  
Update every 1 min  
Indoor IP30  
Part number: 4 260376 260040

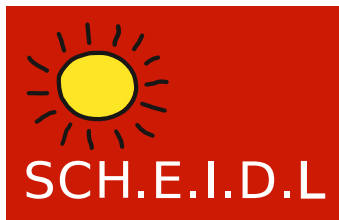
### Repeater

- Philio PAN04-1B  
Part number: 4 713698 571122

### Wireless-Extension

- Z-wave.Me UZB1  
Part number: 4260376260170 and  
Part number: 4016139099354 and  
Part number: 0019962006500
- Aeotec Z-Stick Gen5 AEOEZW090-C  
Part number: 1220000012813

**WARNING** Only the sensors listed here are supported, other sensors will not work



# Energy Controller Datasheet Multi-Datalogger

Web-Monitoring of Environmental, Thermal and Electrical Input

## Technical Specification

### Meter Inputs: 24\* digital

El. power [W] el. energy [kWh]  
wireless with clamps  
cabled S0-pulse  
Configurable weight and unit

### Temperature-Sensor Inputs: 24\* digital

wireless air or cabled sleeve [°C]

### Multisensor Inputs: 24\* digital

0-10V [%], Humidity rel. [%rH] and abs.  
[g/m<sup>3</sup>], Temperature [°C], Dew-point [°C],  
Flood Alarm

### State Sensor Inputs: 6\* digital

cabled on/off, counter on/day, switch/day

### Hot-water-tank Sensor Inputs: 3\* digital

cabled 3x 3, 2x 6 or 1x 12 layers [°C]  
Charge / discharge th. power [W]  
Contained th. energy [kWh]

### User Interface: Browser via network

Keyboard & mouse via PC, tablet, phone  
Languages: English, German

### Recording time: up to 20 Years

Average 1-day kept 5 years, 6-hours for  
2 years, 1-hour for 1 year, 15-min for 3  
month (Meter 1 year), 5-min for 1 month,  
1-min for 2 weeks, 10s for 3 days

### Wireless Sensor Protocol: Z-Wave Plus

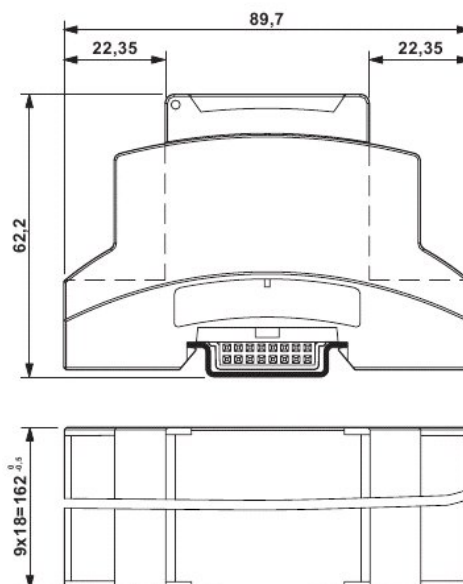
868MHz with +2,5dBm Tx power  
Max 100m distance (outdoor)  
Mesh-net up to 5 distances by repeater

### Cabled Sensor Protocol: 1-Wire

4 independent bus master  
Each max 50m distance  
RJ45 plug according IPS standard  
With +5V 100mA and +12V 200mA

### Network: 10/100Mbps Ethernet plug

\* ) Starter-Kit is limited to overall 4 sensors



### Security: due to Internet connection

SSL/TLS Encryption by 2048-Bit certificate  
Web Application Firewall  
Backup nightly of all logged data  
Security updates nightly  
Password quality check, no defaults

### Power Supply: 12V DC max 630mA

Wall power supply  
Standby <2W max 7,5W

### Housing: 107 x 90 x 63mm 6TE Polycarbon.

Up to IP67 depending from cabinet  
Protection class: I  
for DIN-rail 35mm according DIN EN 60715

### Operating Conditions: +10°C to +40°C

20%rH to 80%rH, non-condensing

### Declaration of Conformity: CE standard for

"unabhängiges RS" according EN 60730  
EMV according EN 55014-1 and EN 61000  
ElektroG WEEE-Reg.-Nr. DE 31037580  
RoHS and REACH

