Statistics

Note!

The described functionality is available for CLU version 5.14.1 or higher.

1. Statistics

1.1 Description and configuration of statistics functionality

The statistics functionality enables:

- displaying energy consumption calculated based on the device's operating time and receiver power,
- displaying data from sensors read directly from devices within the system.

Data is recorded every 15 minutes (starting from the full hour as per the CLU clock) and displayed in the myGrenton mobile application. The application provides detailed charts illustrating energy consumption and sensor readings available within the system. Measurements can be displayed in various time ranges, such as hours, days, or months. Additionally, the myGrenton application provides clear summaries for quick insights into key information without delving into detailed data.

Measurement statistics can be configured for:

- output objects (DOUT , DIMM , LEDRGBW , ZWAVE_DOUT , ZWAVE_LED),
- input objects (DIN, ZWAVE_DIN) operating in either continuous mode (tracking operating time) or pulse mode (counting pulses detected on the binary input),
- SENSOFS (TEMPERATURE_SENSOR, LIGHT_SENSOR_LUX, HUMIDITY_SENSOR, PRESSURE_SENSOR, AIR_CO2_SENSOR, AIR_VOC_SENSOR, SOUND_SENSOR, PANELSENSTEMP, ONE_WIRE, ZWAVE_1W_SENSOR).

Note!

Real media measurement is available only for RELAY 2HP REL-202-D-01 and RELAY 4HP REL-204-D-01.

Note!

Measurement statistics from the temperature sensor are available for Smart Panel modules version v6 and higher, as well as for Touch Panel modules version 1.0.1 and higher.

A. Obtaining a unique measurement key

To obtain a unique measurement key:

- 1. Create an account and log in at <u>https://grenton.cloud/pl</u>.
- 2. Create a new statistics configuration.
- 3. Once created, the system will generate a **unique measurement key**, required to activate the function in the CLU module.

After obtaining the measurement key, you can proceed with the setup in the Object Manager.

B. Creating a configuration in Object Manager

Note!

To use the statistics functionality, the CLU must have an active connection to the cloud. Ensure that:

- the built-in feature CloudConnection is set to True,
- the CLU has internet access.

A lack of cloud connection will prevent the media measurement functionality from working correctly.

To enable the functionality:

- 1. Go to the Embedded Features tab of the CLU object.
- 2. Enter the unique measurement key in the initial value of the MeasurementKey feature (see section X.1.1.A).
- 3. Navigate to the *Embedded Features* tab of the media measurement object.
- 4. Set the StatisticState feature to:
 - Real Or Continuous for output objects,
 - Continuous or Pulse for input objects,
 - On for sensor objects.
- 5. For virtual media measurement (Continuous or Pulse) in input and output objects, the Load feature will appear set its initial value to the device's active power consumption in watts per hour.
- 6. Confirm with the *OK* button.
- 7. Add measurement settings for additional modules repeat the steps above.
- 8. Send the configuration to the CLU.

Note!

To collect measurements from multiple CLUs, the same unique measurement key should be entered into all CLU units in the project with the MeasurementKey feature.

C. Mapping object names

The object name mapping functionality allows for customizing object names displayed in the myGrenton application. Users can assign names consistent with Object Manager settings or give them any custom names for greater intuitiveness.

To configure object name mapping:

- 1. On <u>https://grenton.cloud/en</u>, edit the previously created configuration.
- 2. Load the project from Object Manager in the corresponding object name mapping tab. **Ensure that measurement has been configured for the relevant objects in the selected project.**
- 3. Assign names to objects:
 - keep the automatically set names matching those in Object Manager,
 - alternatively, enter custom, more readable names.
- 4. Save the configuration.

The saved names will appear in the myGrenton application, aiding in object identification during data review or system management.

1.2 Reading statistics in the myGrenton application



To read measurement statistics in the myGrenton application:

- Ensure that a configuration containing the unique key has been sent to the CLU. The key is generated during configuration on <u>https://grenton.cloud/en</u> and is essential for proper data retrieval.
- Enable the functionality in the interface settings in the myGrenton application, activate function by toggling the Statistics switch in the interface settings. Enabling this option will add a statistics tab on the last page of the interface.

After enabling the function, navigate to the Statistics tab in the application. The following options are available on the tab:

• Selecting objects for data display (up to 5 objects):

Select objects Media	Done
Q Search	
ENERGY	DESELECT ALL
Kitchen Light	\checkmark
Living Room Light	\checkmark
Office Light	\checkmark

• Viewing detailed graphs representing data from selected objects. Graphs can be viewed for various time periods: day (hours), week, month (days) and year (months):

Kitchen Light



DAILY CONSUMPTION

Updated at: 11:47



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Statistics Living Room CO...



Kitchen Light



- Viewing summaries with key information about energy consumption and sensor readings.
- (for iOS application) Buttons for navigating to the current day and displaying the graph in fullscreen mode.