Keilton
+autani

CR-01
Energy Monitoring
and
RTC USB Dongle
User Guide
2026

Keilton
+autani CR01-ETC

USB Gateway Lite
Energy Monitoring Data Collector
and Real Time Collector Device
Power by USB 5V Max.
Battery 1*CR2032

Warning:
Pull out the insulation strip before use.

RESET

Install Guide

TF Card

RoHS COMPLIANT | FC Bluetooth | Made in China
FCC ID:2A26YLTKTVT2022 | LED | 01-22

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LiteTrace Brands

TABLE OF CONTENTS

Introduction

About This Guide

Keilton+autani lighting control system is capable of providing energy monitoring reports for customers and clients to better analyze and optimize lighting energy consumption.

Energy data is collected and reports are generated by the Keilton+autani iOS App. This instruction document covers only the devices, procedures, and operations directly related to energy monitoring. Refer to the Keilton+autani App Instruction for general introduction to the app and to Keilton+autani product specifications for their respective instructions.

CR01 Energy Monitoring Dongle

A CR01 energy monitoring dongle is required to collect energy consumption data and generate energy reports. CR01 features include:

- Powered by USB Type-A receptacle

- Embedded real-time clock (RTC) for time synchronization across all devices in the zone, with internal battery to maintain time during power outages

- Record energy consumption raw log data on microSD card

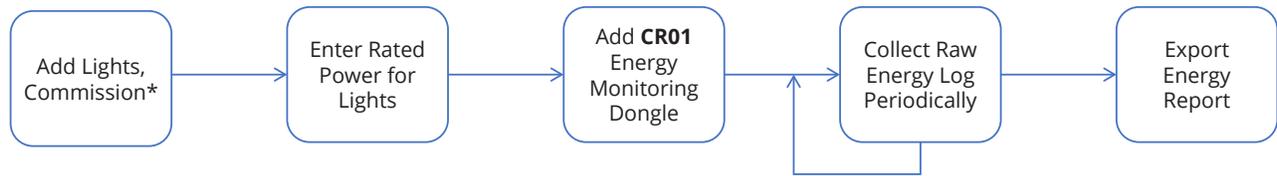Refer to the CR01 Specification for detailed information.

CR01 USB Gateway Lite
Energy Monitoring Dongle

CR01 records energy consumption raw log data for all devices in the zone at 15-minute intervals. For a zone with 100 controllers, approximately 28 megabytes of data is generated per month. For 2 years of data retention, use a microSD card with available capacity greater than 700 MB. Format the microSD card to FAT32 and insert it properly into the dongle.

Data is saved to the microSD card as one file per month, with filename YYYYMM.txt (where YYYY = year and MM = month).
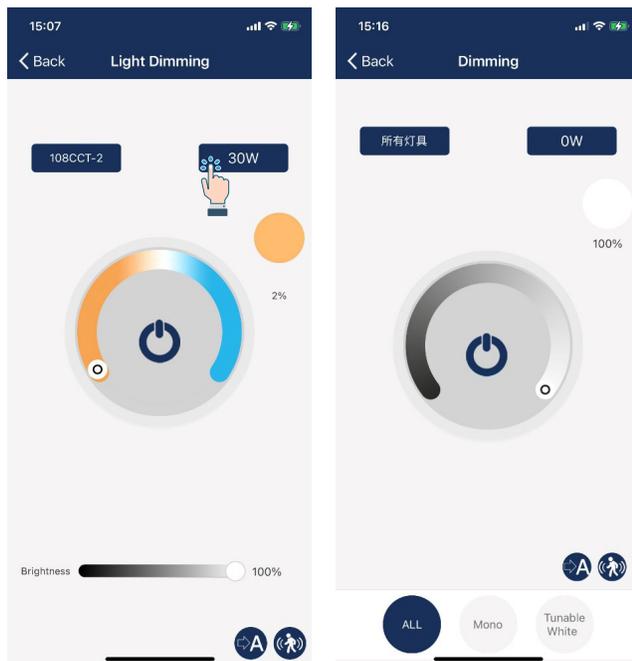
You only need one CR01 for each zone.

Setup and Operation

Add Lights, Commission* → Enter Rated Power for Lights → Add **CR01** Energy Monitoring Dongle → Collect Raw Energy Log Periodically → Export Energy Report

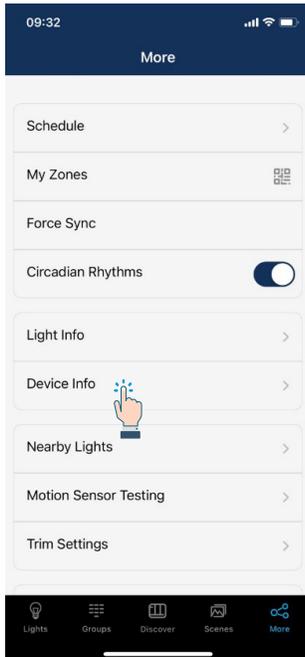Please refer to *Keilton App Instruction* for adding lights and commissioning.
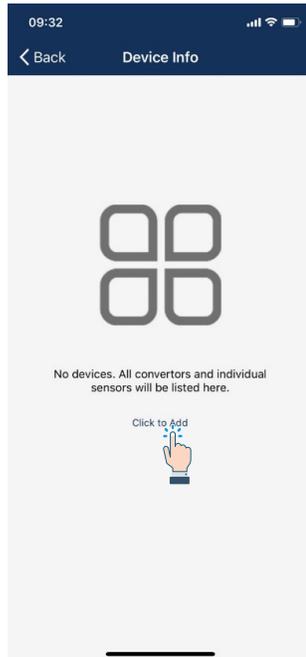
Enter Rated Power for Lights

Note: Rated power is measured in watts and calculated after top-trim settings are applied. For example, enter 24 for a 30-watt luminaire with 80% top-trim setting.

1. In the light's dimming page, select the wattage value in the upper right to set the rated power

2. Alternatively, set the rated power for all lights in a group via the group dimming page. This sets individual light power, not total group power
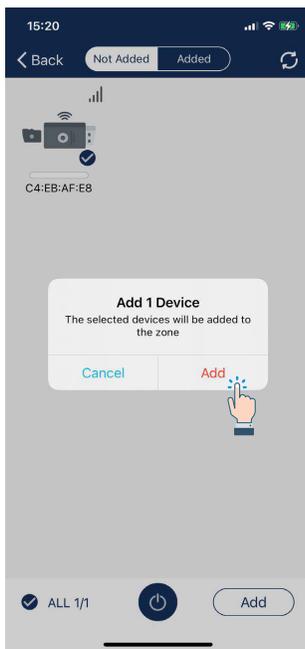
Add CR01 Dongle to Zone
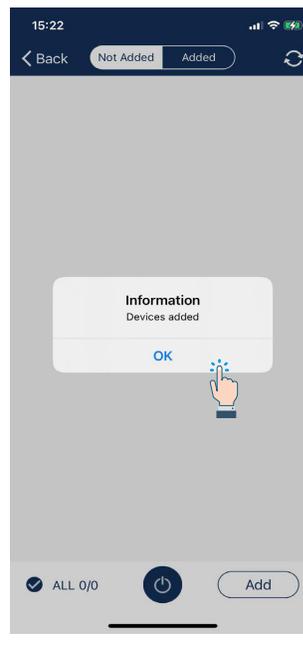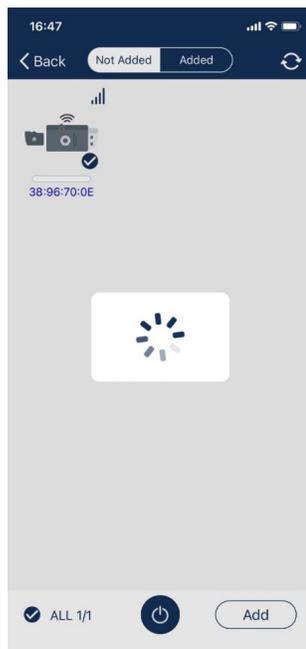

1. Select '**Devices info**' in the '**More**' page

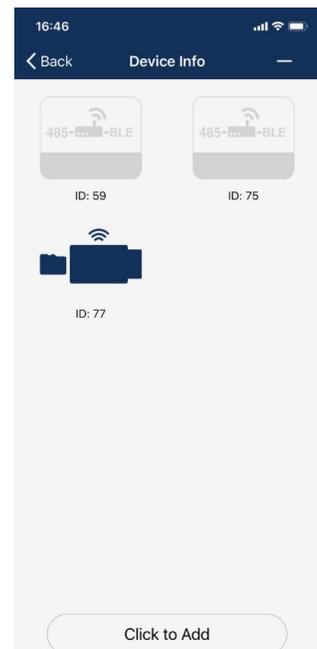**2**. Select '**Click to add**' to search for the CR01 dongle. Ensure the dongle is powered ON

3. Select the dongle checkbox, then select '**Add**'

4. Select '**Add**' to confirm and add the dongle to the zone

5. Select '**OK**' to return

6. The newly added dongle appears in the Device Info page

Collect Raw Energy Log

When a CR01 dongle is added to a zone and powered ON, it continuously records energy consumption data for all lights and controllers at 15-minute intervals. Data is saved with timestamps to files, with each month's data stored in a file named YYYYMM.txt (where YYYY = year and MM = month).
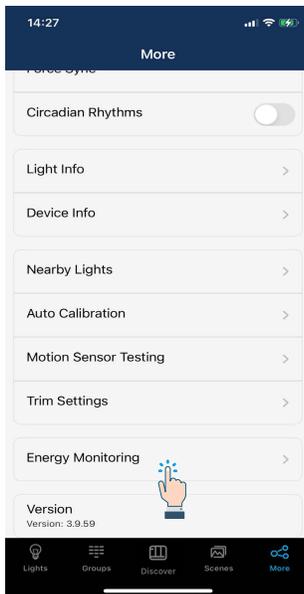
Users must import the raw energy log files into the app to generate energy reports.

Users can use a microSD card reader for mobile devices* to import files directly, or transfer files from the microSD card to mobile device storage (such as iCloud) and then import them into the app.
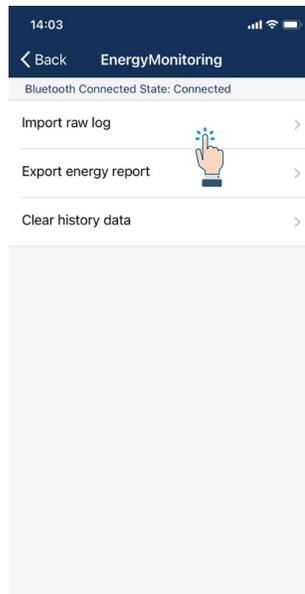
Monthly log collection is recommended.

*microSD card reader for iPhone microSD card readers are not LiteTrace products. This image is for reference only. Any compatible card reader may be used.
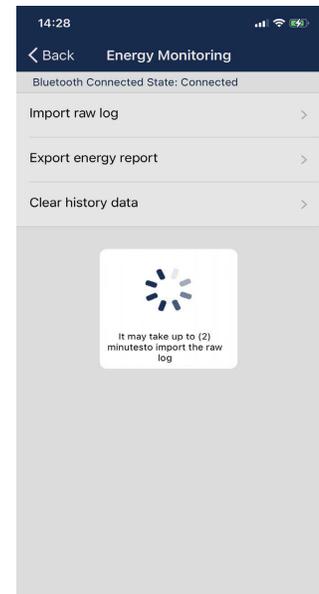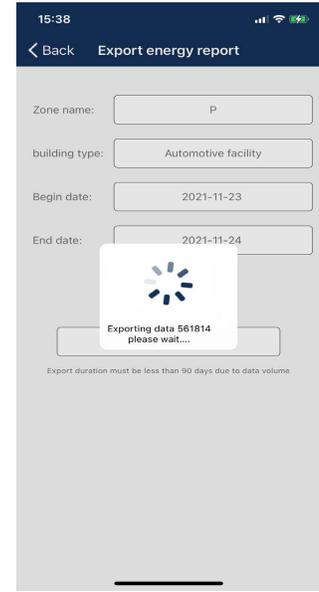
1. Select '**Energy Monitoring**' in the More page
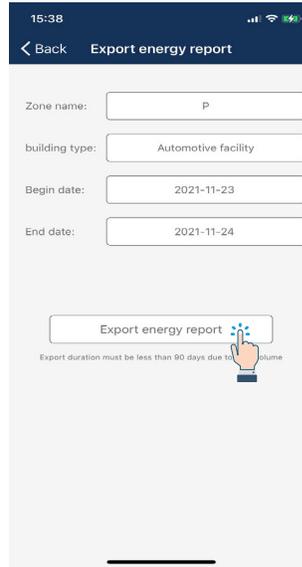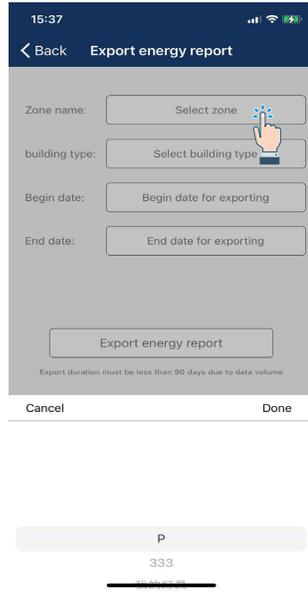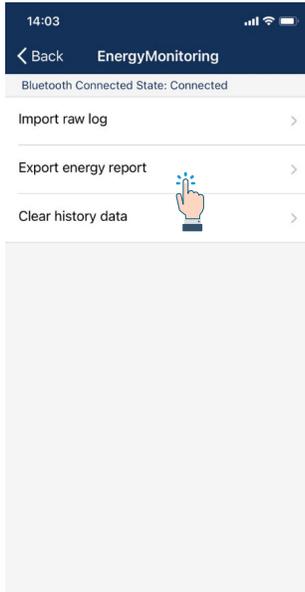
2. Select '**Import Raw Log**'

3. Select the energy log file

4. The app imports the log file into the database. This may take several minutes
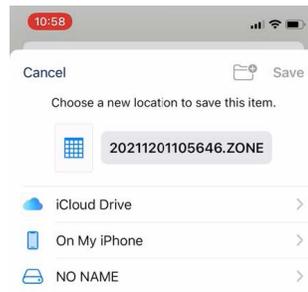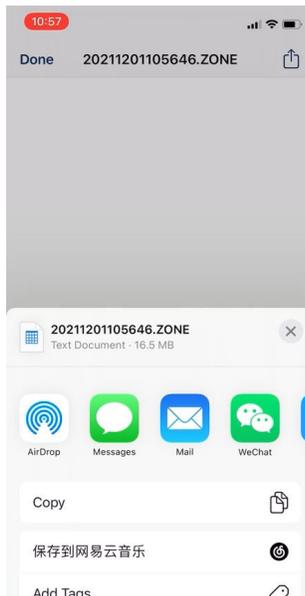
Export Energy Report

1. Select '**Export Energy Report**'

2. Select the zone, building type, and date range (begin and end dates)

3. Select '**Export Energy Report**'

4. Report generation may take several minutes

5. Select a save location for the generated report, such as iCloud or the microSD card

Energy Report Sample

NLC System Manufacturer	LiteTrace			
NLC System Product Name / Model	Keilton			
Building / Business Type	Automotive facility			
Energy Data Reporting Interval	15min			
Zone ID / Name	P			
Estimated Savings	Post-retrofit			
Energy Data Reporting Timestamp	Luminaire ID	Maximum Rated Power without Controls	Power by calculation	Light output %
2021/11/23 10:53	68	120	61	51
2021/11/23 10:53	1	120	12	10
2021/11/23 10:53	72	120	6	5
2021/11/23 10:53	2	90	9	10
2021/11/23 10:53	3	90	9	10
2021/11/23 10:53	4	90	9	10
2021/11/23 10:53	6	30	3	10
2021/11/23 10:53	8	120	12	10
2021/11/23 10:53	5	120	12	10
2021/11/23 10:53	9	30	3	10
2021/11/23 10:53	10	30	3	10
2021/11/23 10:53	11	30	3	10
2021/11/23 10:53	12	120	12	10
2021/11/23 10:53	13	30	3	10
2021/11/23 10:53	14	30	3	10
2021/11/23 10:53	16	90	9	10
2021/11/23 10:53	15	30	3	10
2021/11/23 10:53	17	90	9	10
2021/11/23 10:53	18	120	12	10
2021/11/23 10:53	20	90	9	10
2021/11/23 10:53	19	120	12	10

Need Help?

Technical Support For installation, configuration, and troubleshooting assistance
Support Center: https://autani.zendesk.com/hc/en-us | Email: support@autani.com
Phone: +1 (443) 320-2233 | Hours: Monday-Friday, 9 AM - 5 PM EST

Sales & Product Information
For product questions, quotes, and orders:
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Phone: +1 (443) 320-2233

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MD 21046, United States

Online Resources
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Resources: https://www.litetrace.com/resource

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