ICONET

Iconet Gateway

Documentation

Contents

GETTING STARTED

Overview

What the Iconet Gateway is and what it does for your home.

One gateway for the whole home

The Iconet Gateway runs your home locally: lights, blinds, heating, energy, sensors and cameras from KNX, DALI, Zigbee, Thread, Matter and third-party systems, all in one place, with no cloud in the loop.

What you get

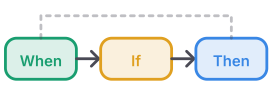
Home

The house live: what's on, energy flowing in real time, the weather and today's numbers.

Rooms

Every device by room, with search and filters that understand plain words.

Workflows



Automations in three steps, when · if · then, or on a full diagram editor.

Trends

Energy, cost, comfort and usage over time, on a board you arrange yourself.

Assistant

Talk to your home in your own words; connect Claude, ChatGPT or any AI through MCP.

Integrations

KNX, DALI, Zigbee, Thread, Matter, cameras, notifications and third-party integrations.

Smart home apps

Everything in Apple Home, Google Home, Amazon Alexa and SmartThings through Matter.

Local by design

Everything runs on the gateway. Your data stays on your network; the internet is only needed for updates, the weather forecast and the assistants you choose to connect.

Next steps

- Quick start — from the box to the first light in 10 minutes.
- System requirements

GETTING STARTED

Quick start

From the box to your first light in about 10 minutes.

What you need

- The Iconet Gateway.
- An Ethernet cable to your router or switch (PoE powers the gateway; otherwise the 24 V supply).
- A phone or computer on the same network.

1 · Connect and power up

Clip the gateway on the DIN rail, plug the Ethernet cable, and wait until the front LED is steady (about one minute).

2 · Open the web app

In your browser go to:

```
http://iconet.local
```

If that name does not resolve on your network, use the IP address your router gave the gateway (it appears in the router's device list as **iconet**).

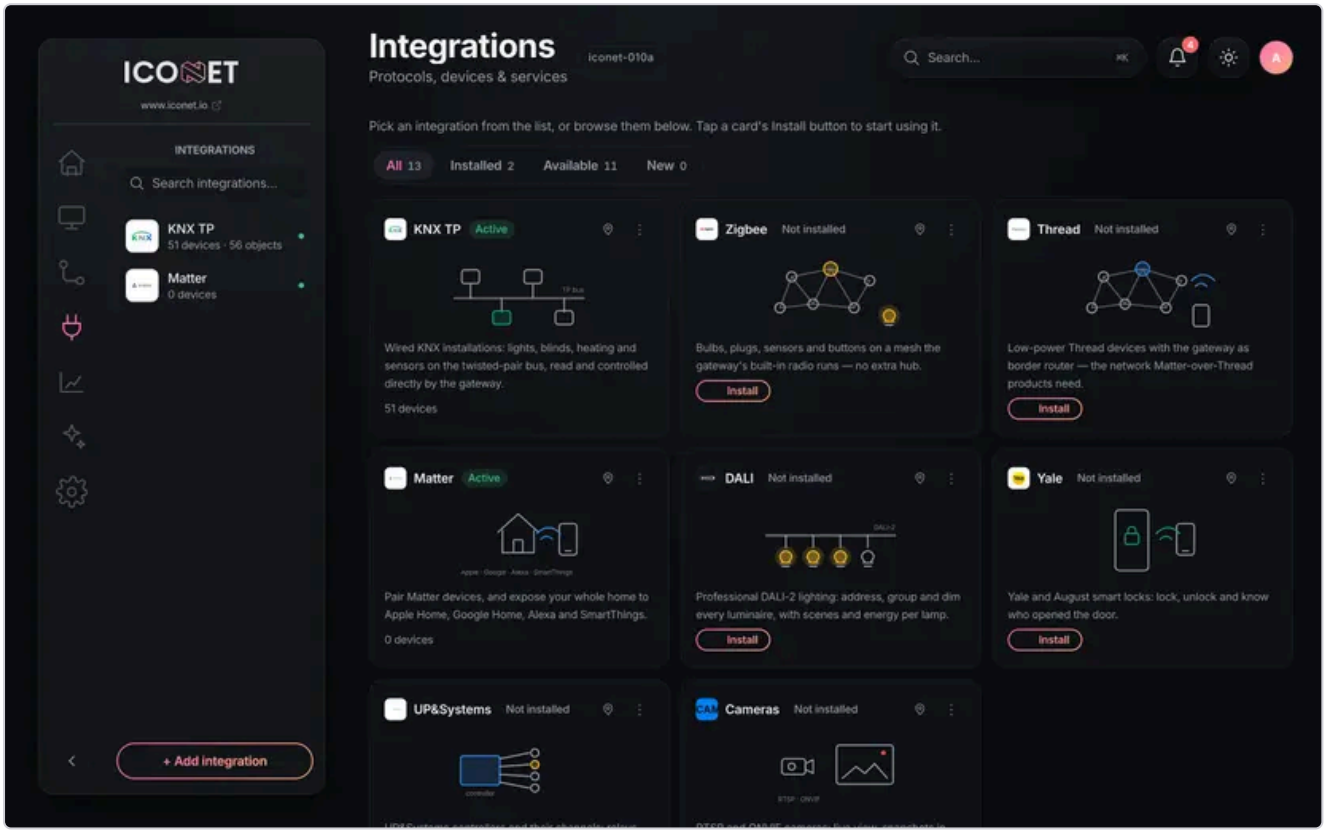
3 · Run the welcome wizard

The first time, the gateway asks for four things:

1. **Name** — how this gateway is called (for example "Home").
2. **Timezone** — for schedules and sunrise/sunset.
3. **Location** — search your address or drop the pin on the map. It powers the weather on Home, sunrise/sunset and location-aware automations. Optional, and you can change it later in Settings › System.
4. **Your account** — a username and password to protect the web app.

4 · Add your first devices

Go to **Integrations**, pick what you have (KNX, DALI, Zigbee, Thread/Matter, cameras, third-party integrations) and tap **Install**. Each integration has its own short guide in this documentation.



5 · Put devices in rooms

Open **Rooms**, create your rooms with **+ Add room**, and open any device to assign it. Rooms give the Home page, the assistant and the automations their vocabulary ("the kitchen light").

6 · Tell Trends about your energy

If you have an energy meter, solar or a battery, open **Trends › Setup** and choose which device measures what, and what a kWh costs. Every energy card fills itself from there.

Done

Your Home page now shows the house live. Next:

- Home — what each part of the page means.
- Workflows — your first automation in three steps.

- Connect an AI assistant — talk to your home from Claude or any MCP client.

GETTING STARTED

System requirements

Hardware, network and what the gateway connects to.

The gateway

Mounting	DIN rail, 4 modules
Power	PoE (IEEE 802.3af) or 24 V DC
Consumption	under 5 W
Network	Ethernet 10/100, RJ45
Radios on board	Zigbee 3.0 · Thread (border router)
Wired buses	KNX TP · DALI-2
Operating temperature	−10 °C to +50 °C

Network

- Ethernet, DHCP by default (static IP available in Settings › Network).
- mDNS on the local network so `http://iconet.local` works.
- Internet is optional: it is used for updates, the weather forecast and the AI assistants you connect. Everything else runs offline.

What it connects to

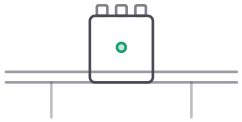
Integration	What
KNX	Any KNX TP device; the gateway is also a KNXnet/IP interface for ETS
DALI	DALI-2 luminaires, up to 64 addresses per bus (external DALI power supply required)
Zigbee	Zigbee 3.0 devices on the built-in coordinator
Thread / Matter	Matter devices over Thread (built-in border router) and over your IP network
Third-party	Controllers and services from other makers, adopted over the network
Cameras	RTSP and ONVIF cameras
Notifications	Telegram, WhatsApp, e-mail, ntfy, webhooks
Smart home	Apple Home, Google Home, Amazon Alexa, SmartThings through the Matter bridge

Browser

Any current browser on a computer, tablet or phone: Safari, Chrome, Edge, Firefox. The web app adapts to the screen size; no app store install is needed.

INSTALLATION

Physical connection



Mount, wire and power the gateway.

Mount

The gateway clips on a standard 35 mm DIN rail and takes 4 modules. Leave a little space around it in the cabinet; keep it away from the hottest components.

Power and network

One Ethernet cable does both when your switch provides **PoE (IEEE 802.3af)**. Without PoE, connect **24 V DC** to the power terminals. The gateway draws under 5 W.

Buses

Terminal	Wiring
KNX	Red to +, black to −, from the KNX bus line
DALI	Two wires, either way round. The DALI line needs its own power supply: the gateway does not power it

Radios for Zigbee and Thread are built in; nothing to connect.

Power up

Connect the Ethernet cable last. After about a minute the front LEDs settle and `http://iconet.local` answers. Continue with the quick start.

INSTALLATION

Network

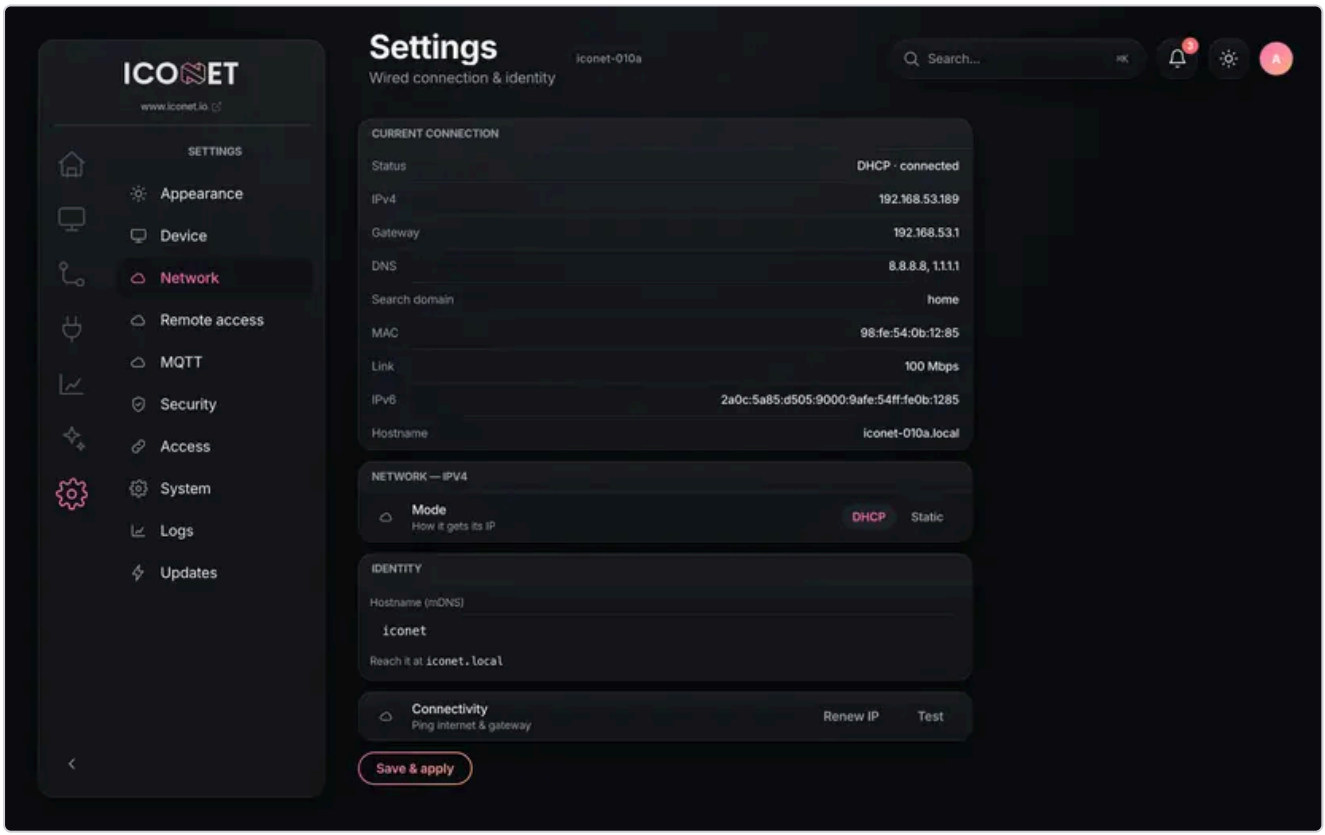
Finding the gateway, giving it a fixed address, and what it needs from your network.

Finding it

The gateway asks your router for an address (DHCP) and announces itself as `iconet.local`. If that name doesn't resolve, use the IP from the router's device list; it shows as **iconet**.

Fixed address

Settings › Network › Mode › Static: address, prefix, gateway and DNS, then **Save & apply**. A static address stays across reboots. If the address or the gateway you entered is wrong, the gateway returns to DHCP on its own so you never lose it. You can also change the **hostname** (what comes before `.local`).



Ports

Port	Used for
80	The web app and the local API
5353 UDP	mDNS: `iconet.local`, Matter and Apple/Google discovery
5540	Matter bridge (one more per additional bridge)
3671 UDP	KNXnet/IP for ETS, when enabled

Keep the gateway, your phone and your smart-home hubs on the same network (or allow mDNS between VLANs) so the apps can find it.

Internet

Optional. Used for updates, the weather forecast, cloud AI providers and remote access through your Iconet account. **Settings › Network › Test** pings the router and the internet.

INSTALLATION

First boot

What the gateway does the first time, and the welcome wizard.

The first minute

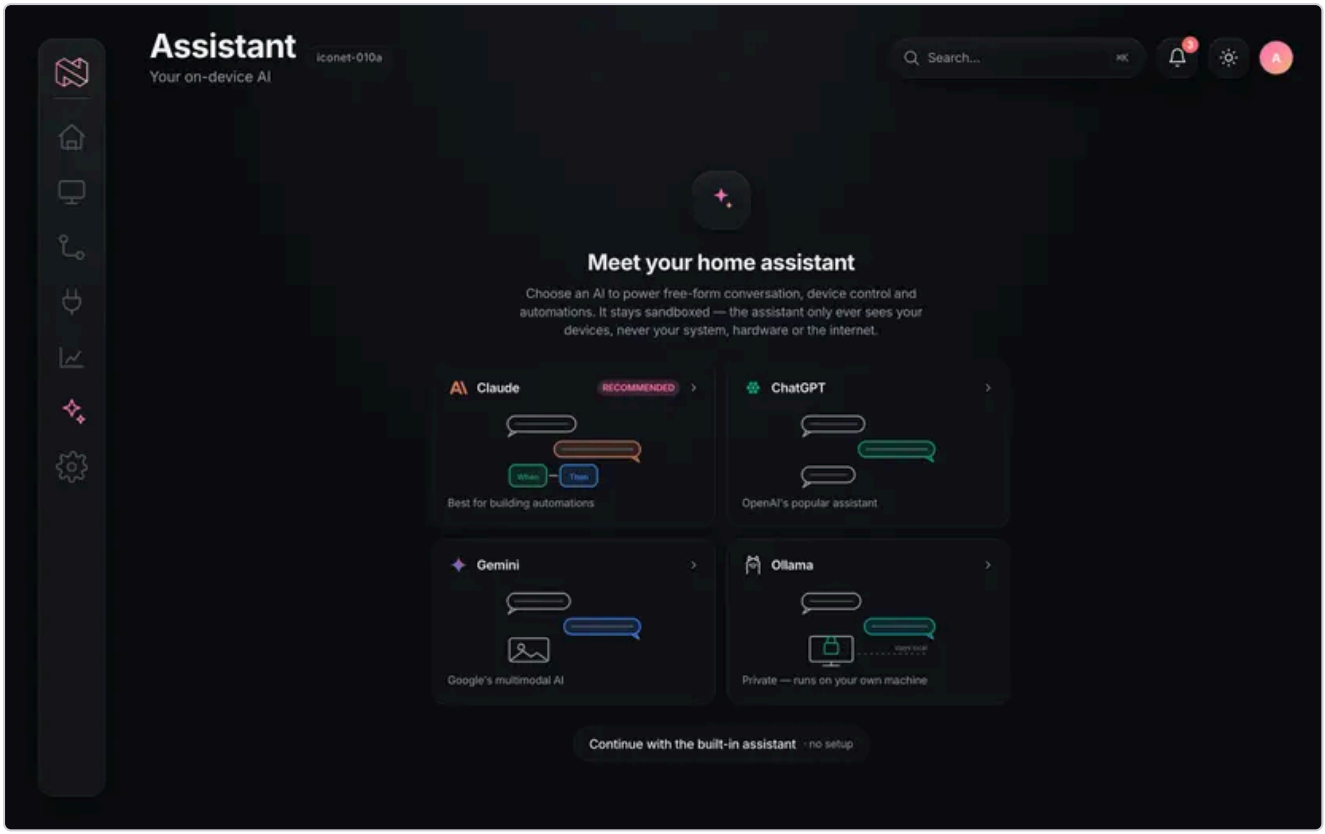
After power-up the gateway checks itself, joins the network and starts its services. It is ready when `http://iconet.local` answers; that takes about a minute.

The welcome wizard

The web app opens with a short wizard:

1. **Name** of this gateway.
2. **Time zone**.
3. **Location** — search the address or drop the pin. It powers the weather, sunrise/sunset and location automations. Optional, editable later in Settings › Device.
4. **Your account** — username and password.

After that you land on Home, which explains what it will show once devices are connected, and points you to Integrations.



Nothing preloaded

A new gateway carries no demo data and adopts nothing by itself. What you see is exactly what you add.

Starting over

Settings › System › **Factory reset** erases all settings (the network returns to DHCP) and reboots into the wizard. Export the configuration first if you might want it back.

USING ICONET

Home

Your home at a glance: what's on, energy flowing live, the weather and today's numbers.

The page, top to bottom

1. **Greeting line** — whether the house is secure, how many devices are active, and anything offline.
2. **Scenes & actions** — Good morning, Good night, Away, Movie, plus All off and Lock home. One tap.
3. **Your home, live** — the house itself. Windows light up at night, and power flows along the wires as it happens: solar from the roof, grid from the street, battery on the wall, the car in the garage. The three numbers on the right are today's solar, consumption and savings.
4. **The sky today** — the weather right now, the sun's position between sunrise and sunset, and the last 24 hours of consumption.
5. **Status chips** — inside/outside temperature, lights on, doors or windows open, presence, today's peak, self-powered share. Tap one to go there.
6. **Weather** — the forecast for the next 24 hours and the next 7 days, for your location.

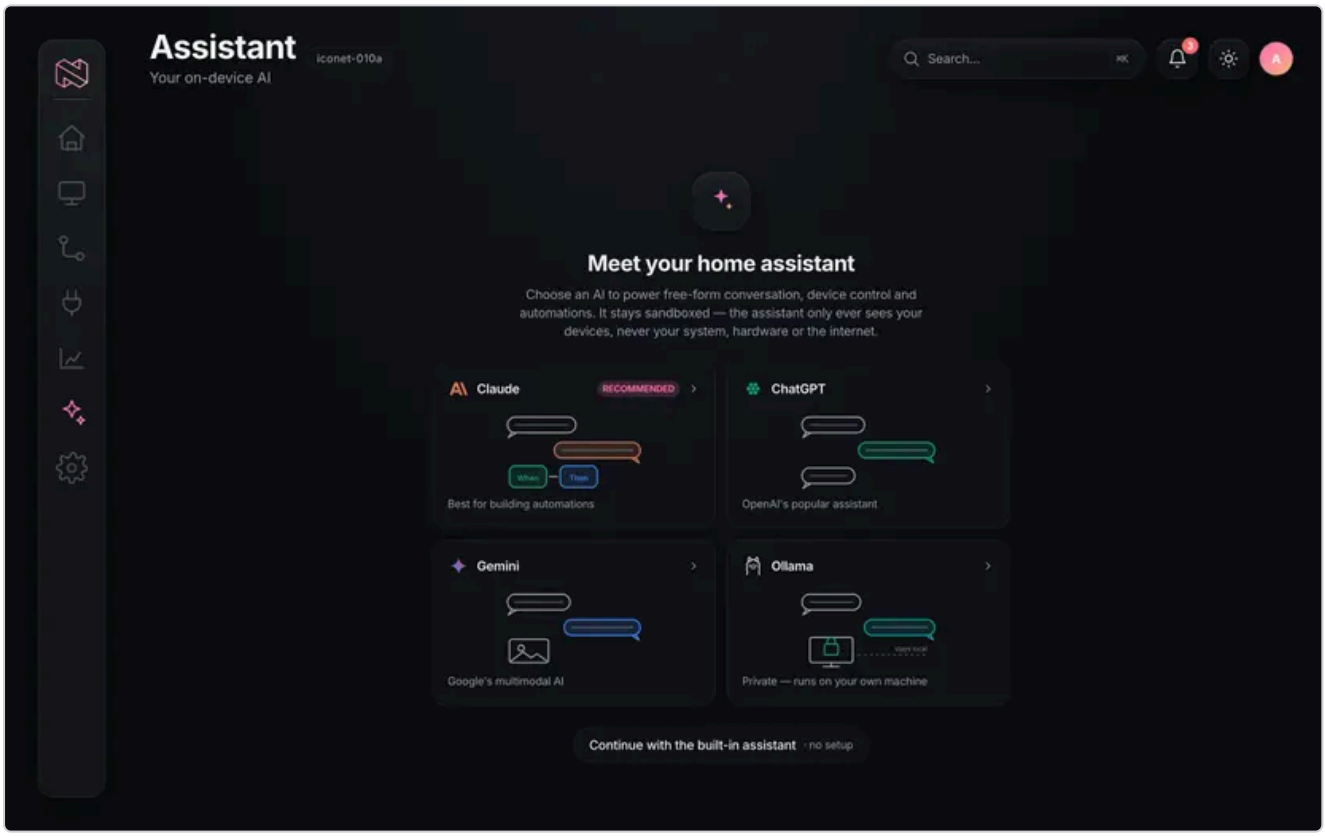
7. **Status tiles** — Security, Climate and Devices (tap when something is offline).
8. **Favorites** — the devices you starred, one tap away.

Arrange it

Tap **Edit**: drag cards to reorder, pull the corner to resize, hide what you don't need. Hidden cards come back from the **Hidden** row.

First time

Before any device is connected, Home explains what it will become and points you to Integrations. The weather card works from day one once the location is set.



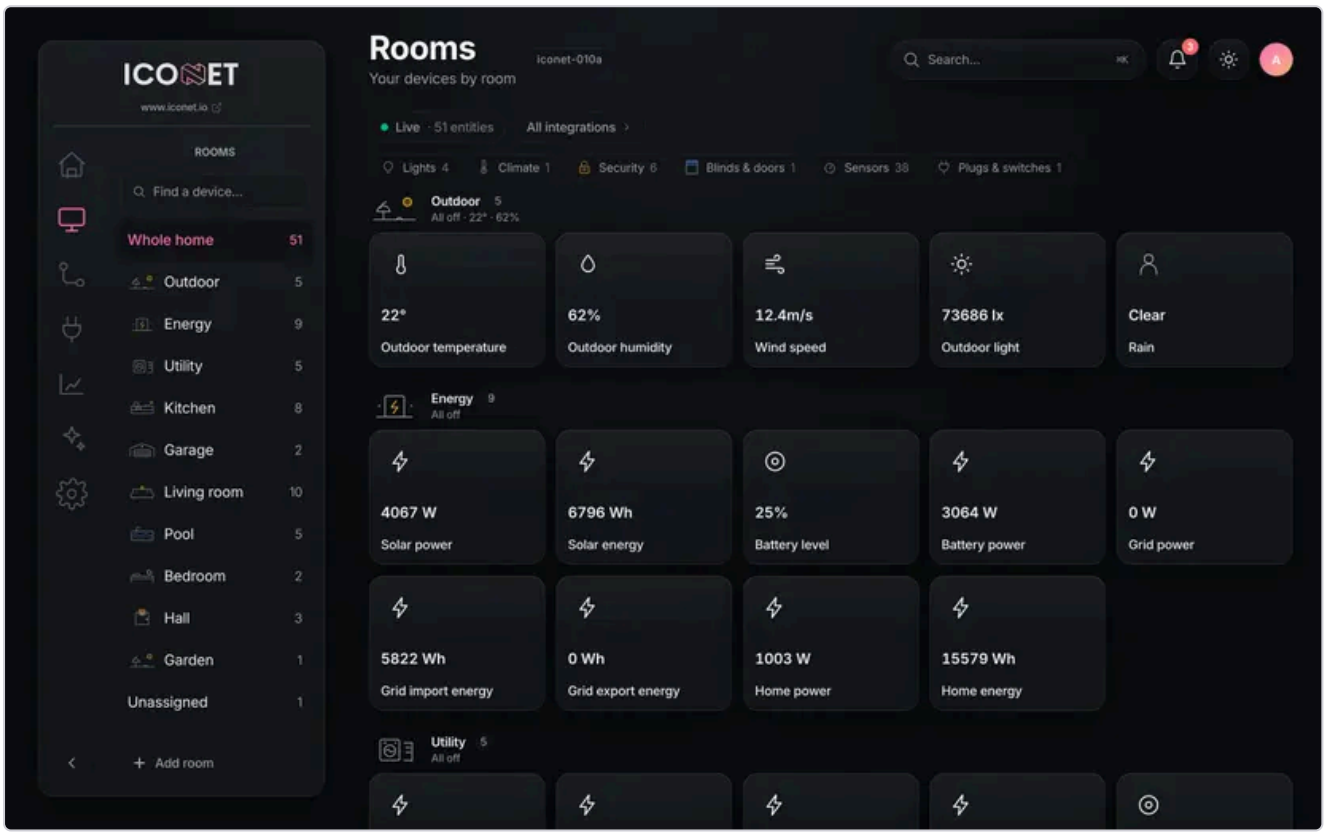
Where the numbers come from

- Energy: the meters you choose in **Trends › Setup** (grid, solar, battery, whole home) or, if none is set, the devices that report power.
- Weather: the gateway's own forecast for the address in Settings › System (MET Norway, updated hourly).
- Savings: solar you used at your electricity price plus what you exported at the export price.

USING ICONET

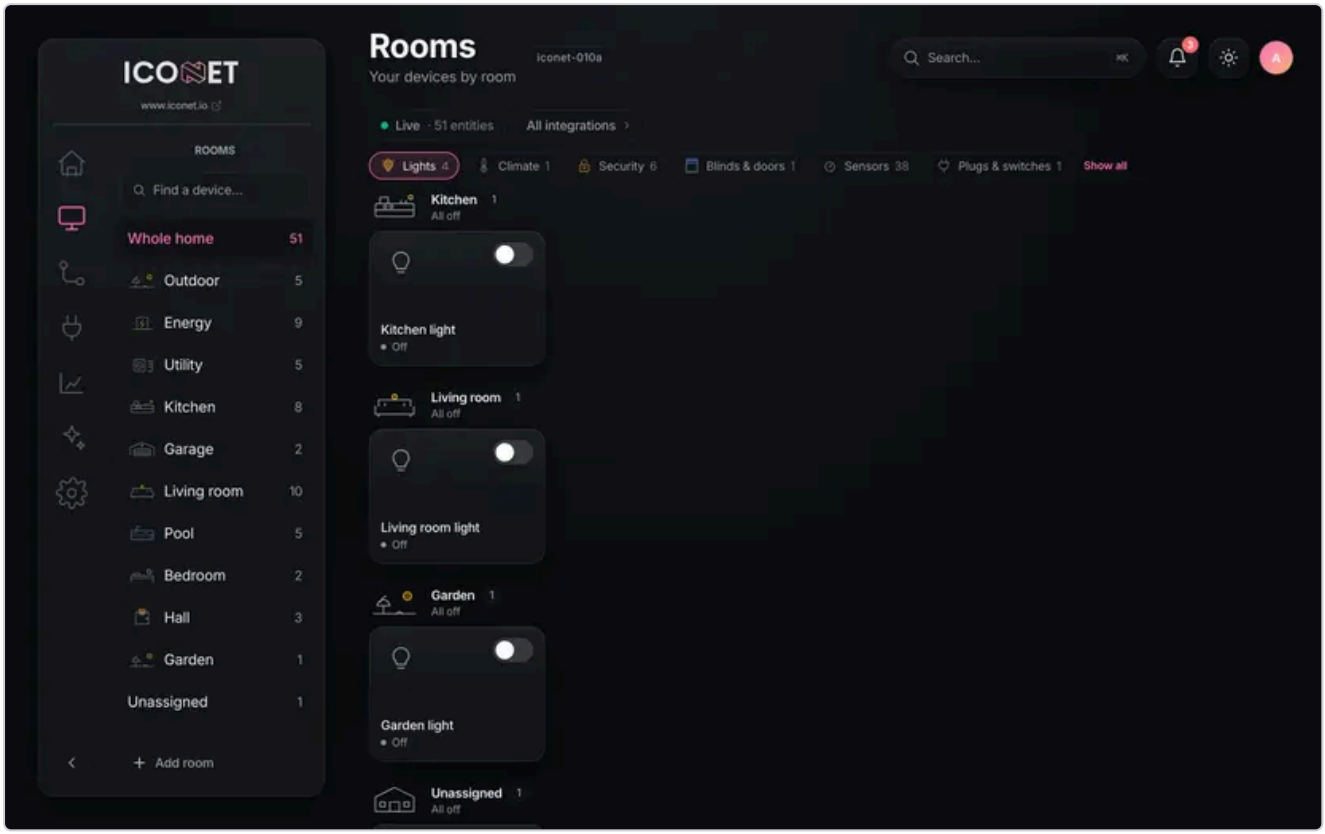
Rooms

Every device by room, with search and filters that understand plain words.



Find anything

- **Find a device** (left column) searches the whole home, whatever room is selected: a name ("kitchen light"), a room, a type, a state. It understands everyday words in several languages: *lights, luz, Licht, lumière*; *blinds, persianas*; *open, off, offline*.
- **Type chips** — Lights, Climate, Security, Blinds & doors, Sensors, Plugs & switches, Cameras — filter with one tap and show live counts.
- **All integrations** ▾ — narrow to one integration (KNX, Zigbee…) and show or hide controller inputs.



Tiles

Each tile shows the device drawn in its state: a lamp lit, a blind with its slats at the real position, a door ajar, a lock closed. Tap the toggle or the arrows to act; tap the tile to open its details, history and settings; tap the star to add it to Home › Favorites.

Rooms

- **+ Add room** creates one. Hover a room and use the pencil to rename it or pick its drawing (the drawing is guessed from the name; choose another any time).
- Open a device and set its room in the details panel. Devices without a room sit under **Unassigned**.
- Each room header shows what is going on: lights on, temperature, humidity, anything open, someone present.

Tips

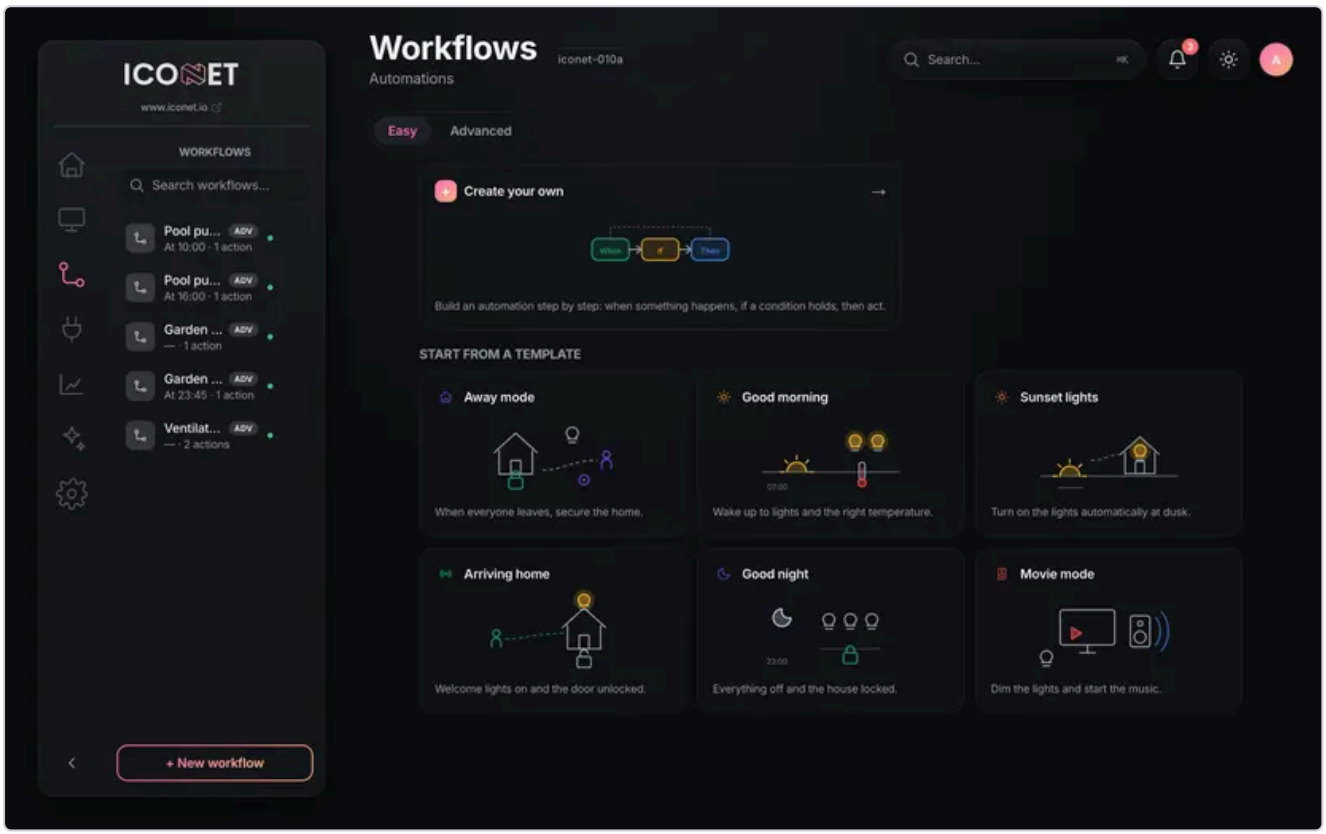
- Names matter: "Kitchen light", "Bedroom blind" make search, the assistant and automations understand you. Name devices the way you would say them.

- Controller inputs (dry contacts on third-party controllers) are hidden by default; show them from the integrations menu when wiring or automating.

USING ICONET

Workflows

Automations in three steps — when, if, then — or on a full diagram editor.



Start from a template

Open **Workflows**. The **Easy** tab offers ready-made automations: Away mode, Good morning, Sunset lights, Arriving home, Good night, Movie mode. Tap one, adjust the devices, save. Or tap **Create your own**.

Away mode

When everyone leaves, secure the home.

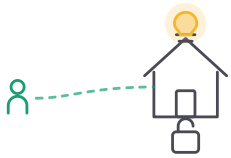
Good morning

Wake up to lights and the right temperature.

Sunset lights

Turn on the lights automatically at dusk.

Arriving home

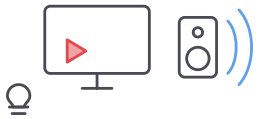


Welcome lights on and the door unlocked.

Good night

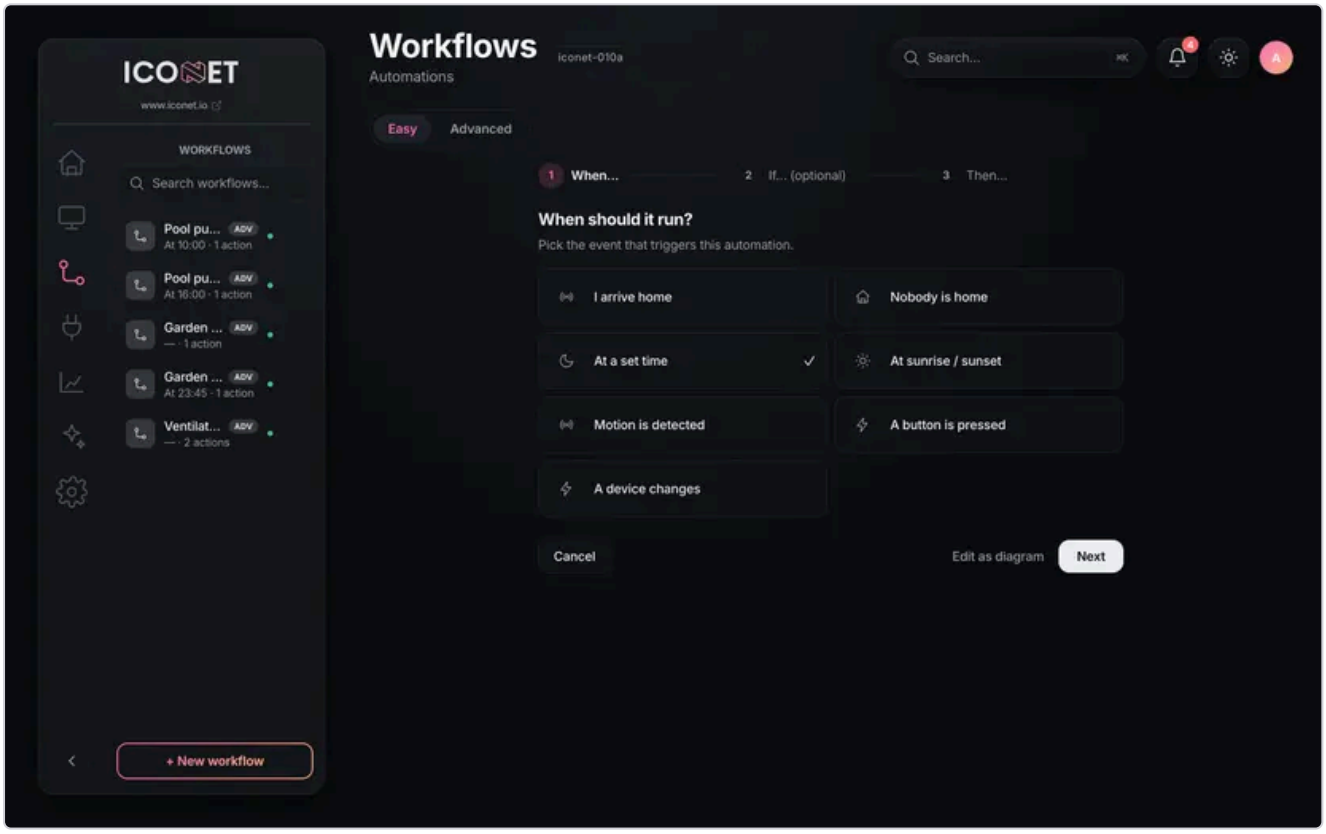
Everything off and the house locked.

Movie mode



Dim the lights and start the music.

The three steps



1. **When...** — what starts it: a set time, sunrise/sunset, arriving home, nobody home, motion, a button press, a device changing.
2. **If... (optional)** — a condition that must hold: a device's state, a KNX object's value, weekdays.
3. **Then...** — what happens: switch, dim, move blinds, set a temperature, lock, run a scene, wait, send a notification, write a KNX object.

Give it a name and **Save**. The automation appears in the left list with its summary; the dot shows whether it is enabled.

Advanced: the diagram

Edit as diagram (or the **Advanced** tab) opens the visual editor: blocks for triggers, conditions, actions, delays, branches and small code snippets, joined by wires. Anything built in the easy editor can be opened here for more.

Live

Every run is logged: open a workflow and see when it last ran and what it did. Disable one with its switch; delete from the ✕ on the list.

From the assistant or an AI client

The built-in assistant and any AI connected through MCP can create automations for you ("turn the garden light off at 23:30"). Those arrive as **drafts**: review and enable them here.

USING ICONET

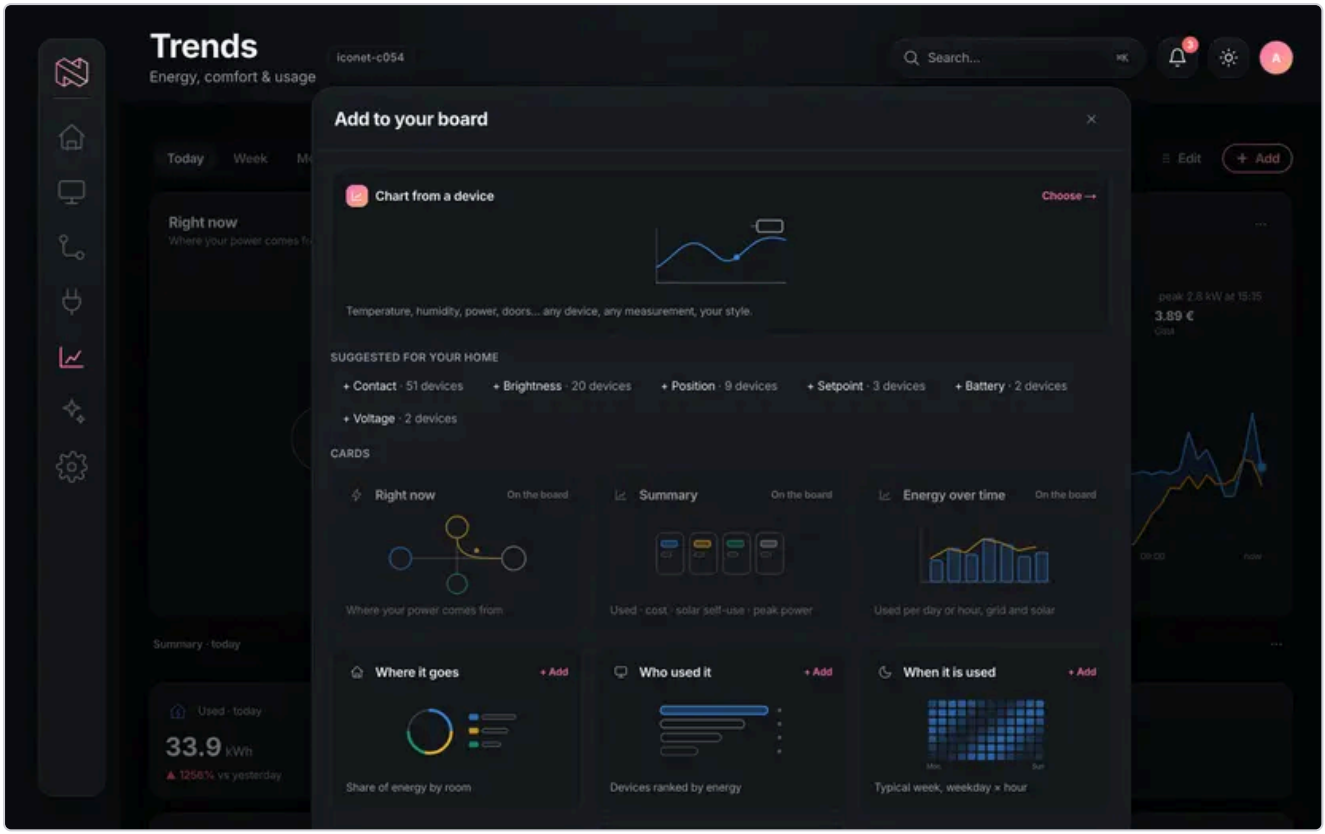
Trends

Energy, history and costs on one board you arrange yourself.

One board

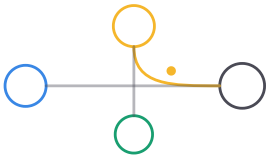
Trends is a single board of cards. The energy cards fill themselves once you tell the gateway which meters measure what; the rest you add: any device's history as a chart, comparisons, peaks.

- **Edit** — drag cards to reorder, pick a size (S, M, L, XL), hide the ones you don't need. **Done** when you're happy.
- **··· on a card** — resize, rename, remove.
- **+ Add** — a sheet with everything you can put on the board, each with a drawing of what it will look like.



Some of what you can add

Right now

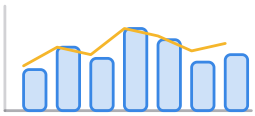


Where your power comes from.

Summary

Used · cost · solar self-use · peak power.

Energy over time

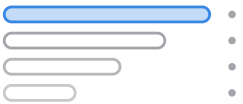


Used per day or hour, grid and solar.

Where it goes

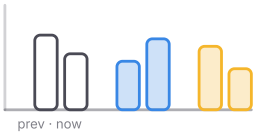
Share of energy by room.

Who used it



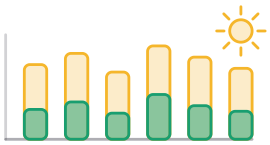
Devices ranked by energy.

This vs previous



The period against the previous one, kWh and € side by side.

Solar balance

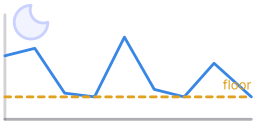


Solar used · sent out · bought, per day.

Comfort

Temperature and humidity by room.

Standby



Night floor in W and € per year.

Setup (the gear)

Open **Setup** and pick the devices that measure your home:

Source	What to select
Grid	The meter at the point of connection (power, or import/export energy counters)
Solar	The inverter's power or energy output
Battery	Battery power and state of charge
Home	Total consumption, if you have a separate meter

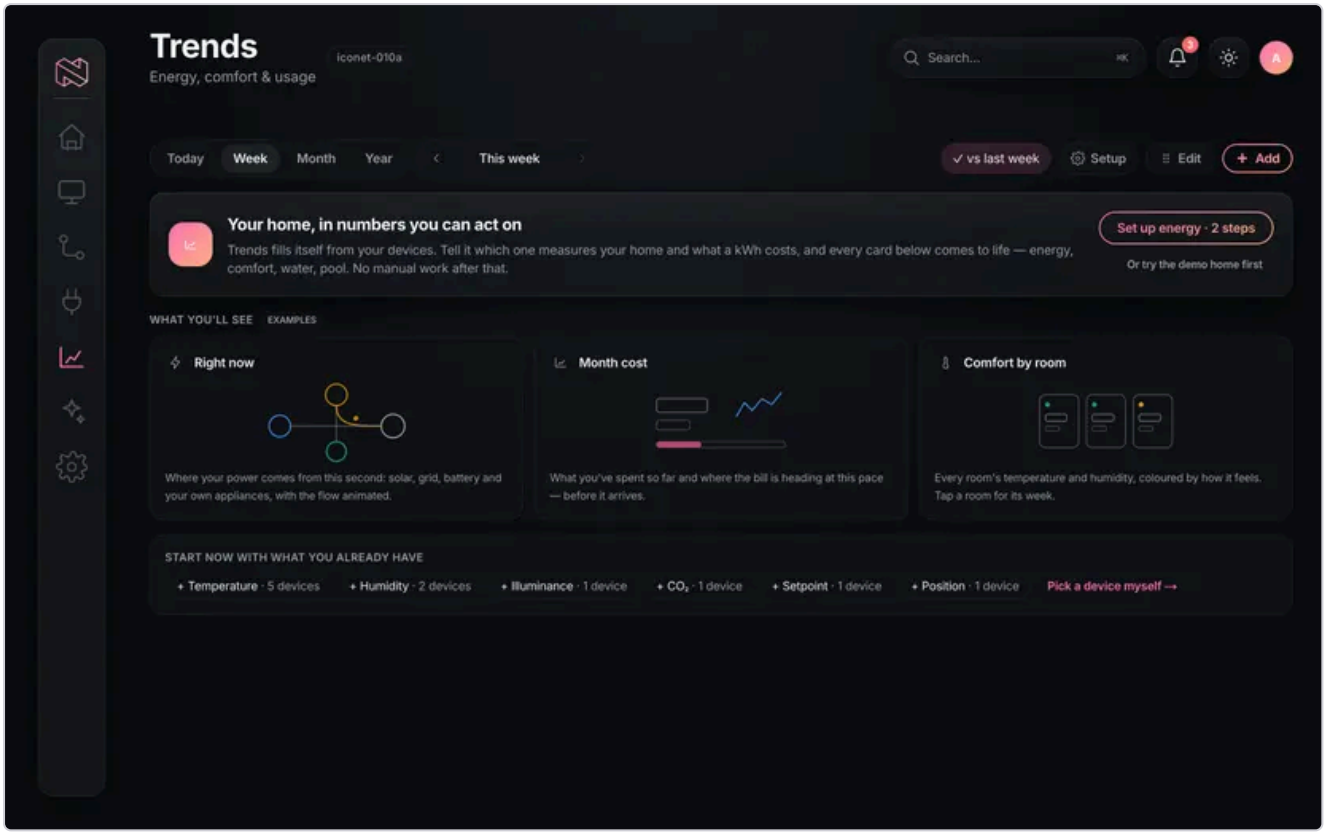
Then set your **prices**: electricity per kWh, what you receive per exported kWh and, if you meter them, water and gas. Every cost and savings figure on Home and Trends is calculated from these numbers.

Ranges

Every card follows the range you choose at the top: **Today**, **Week**, **Month** or **Year**. Times are shown in the gateway's time zone.

First time

Before any meter is set, Trends shows what each card will become and the two steps to get there. Nothing is invented: cards stay empty until real data arrives.



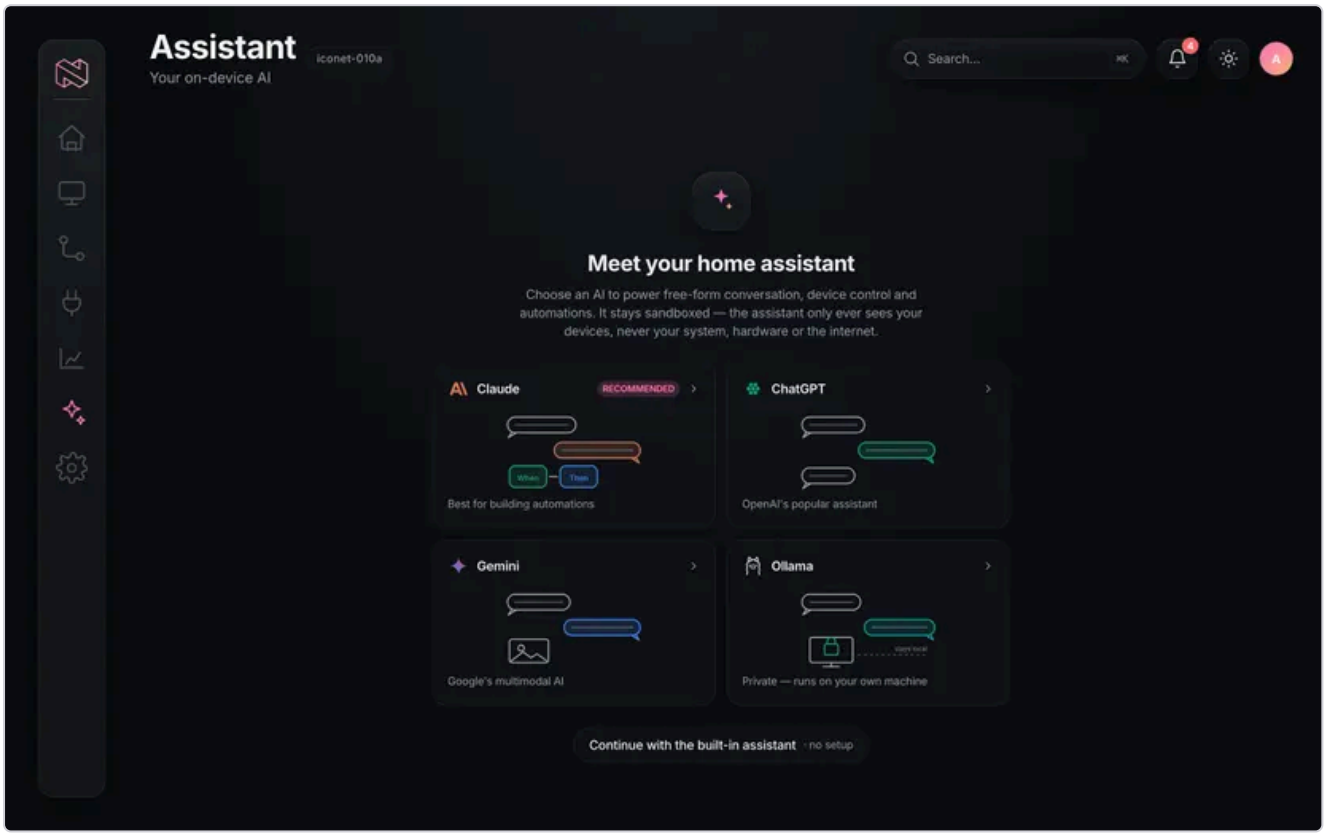
Where the data lives

History is recorded on the gateway itself, for every device, whatever integration it comes from. Nothing leaves your network. The same series are available to the assistant and to connected AI clients through the *Read trends* permission.

USING ICONET

Assistant

Talk to your home in plain language, in your language.



What it does

The assistant lives in the sidebar. Ask it what is going on, tell it what to do, or ask it to build an automation:

- "Is anything open?" · "Which lights are on?" · "How warm is the bedroom?"
- "Turn off the kitchen light" · "Close all the blinds" · "Set the living room to 22°"
- "Every night at 23:30, switch the garden lights off"
- "How much solar did we produce this week?"

It understands the names you gave your devices and rooms, in English, Spanish, French, German, Italian or Portuguese, and copes with synonyms ("lamp", "lights", "luz", "Licht").

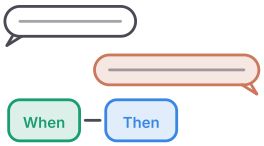
Before it acts

Anything that changes the home is shown as a card for you to confirm. Automations it creates are saved as **drafts** in Workflows until you enable them.

Choosing the brain

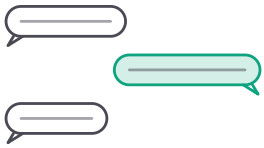
Open the Assistant and tap the provider chip at the top. Pick one and paste its key:

Claude



Recommended. Best at long, mixed requests.

ChatGPT

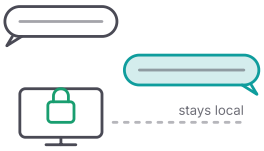


OpenAI's models, with your own key.

Gemini

Google's models, with your own key.

Local (Ollama)



Runs on a computer in your network; nothing leaves home.

On-device

No key, no internet, zero load: understands the common commands.

What it never sees

The assistant only knows your rooms, devices, states, energy and automations. It has no access to the gateway's system, files, network settings or updates, whichever provider you choose. Device names are all it sends out; the model never learns which hardware or software the gateway runs.

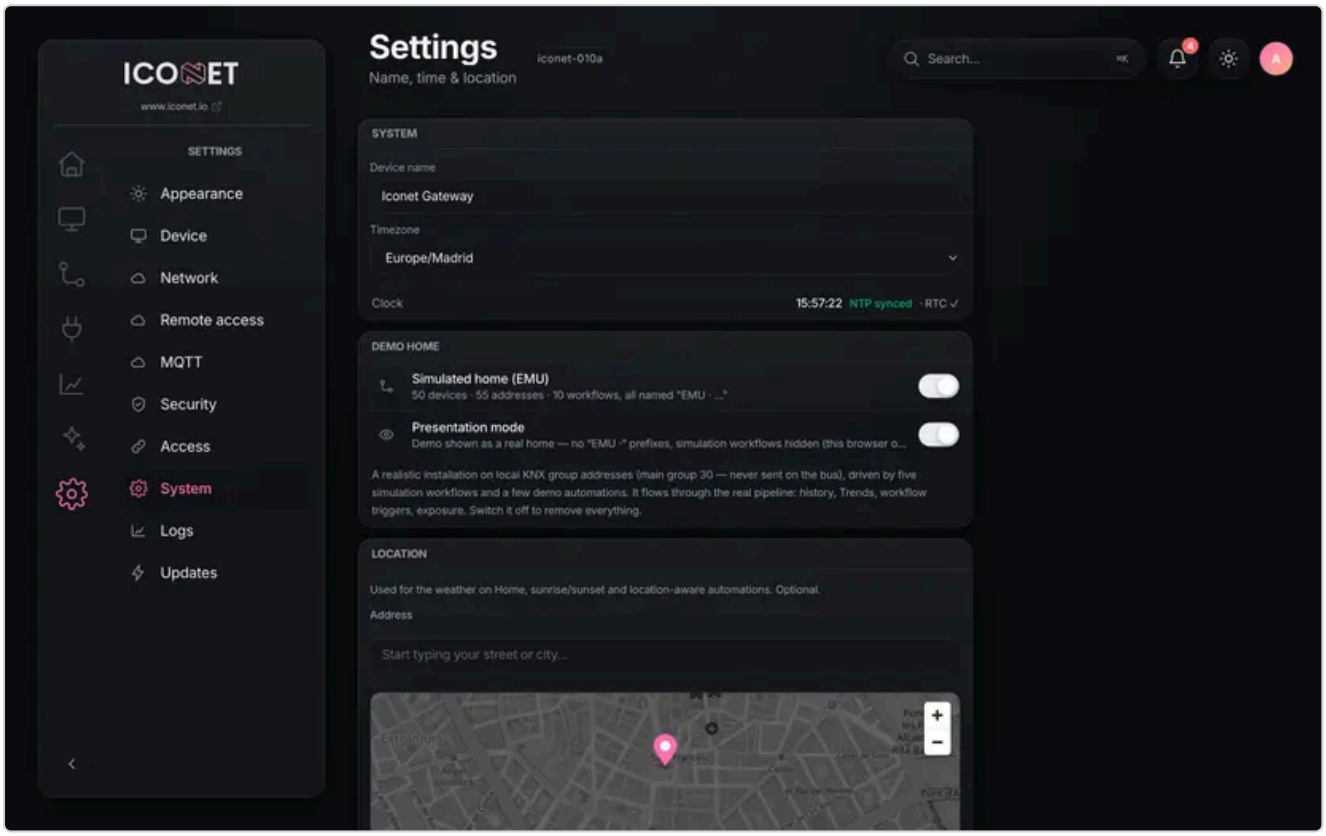
Your own AI client

Prefer Claude Desktop, Claude Code, ChatGPT or another app you already use? Connect it to the gateway through MCP: see Connect an AI client.

USING ICONET

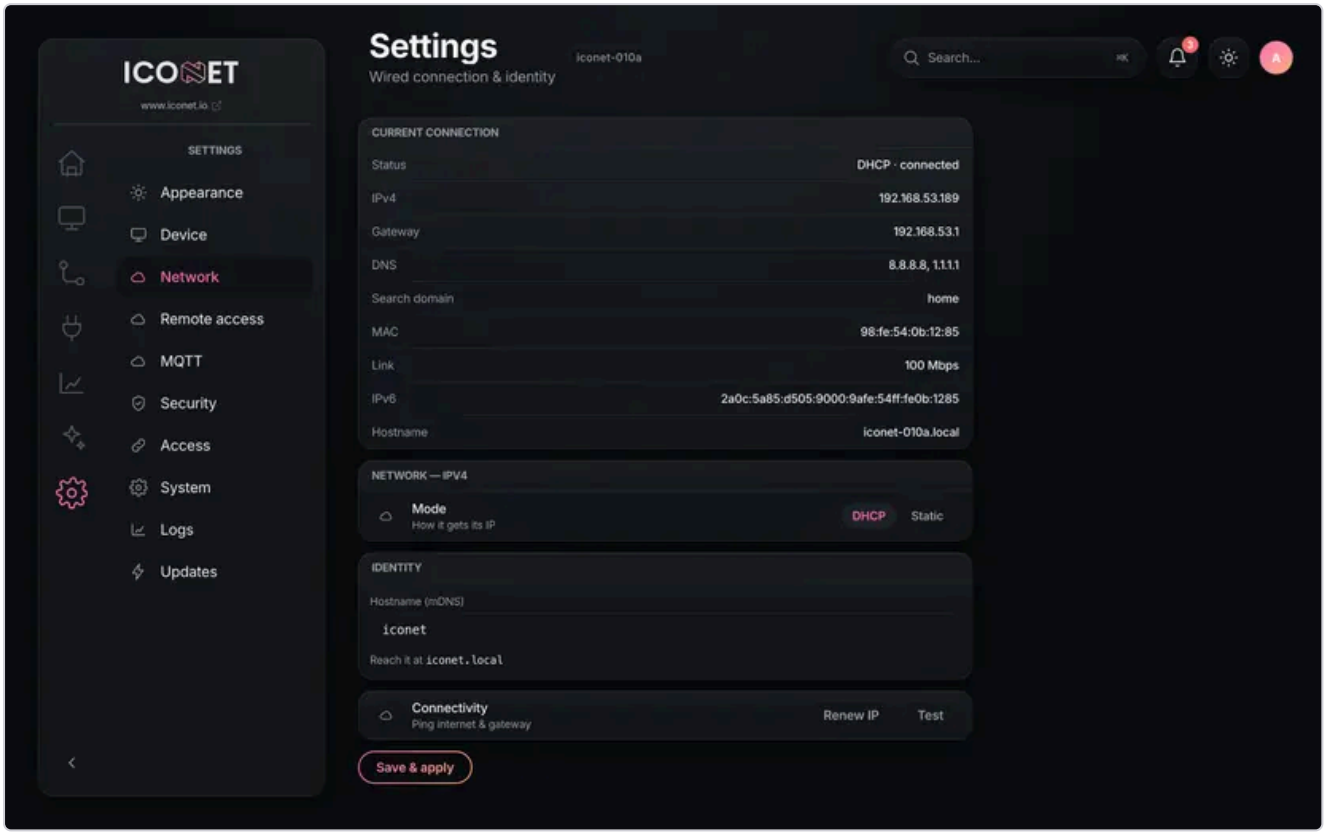
Settings

Everything about the gateway itself, in one place.



Section	What is there
Appearance	Light, dark or system theme; accent colour; Celsius / Fahrenheit
Device	Name and time zone of this gateway, the address used for weather and sunrise/sunset
Network	DHCP or static IP, hostname, connection details
Remote	Link this gateway to your Iconet cloud account for access from anywhere
MQTT	Publish devices to an MQTT broker (Home Assistant discovery supported)
Security	Change the password; new security code
Access	Tokens for AI clients and other apps on your network. See Access tokens
System	Reboot, factory reset, export/import configuration, identify (front LEDs blink), demo home
Logs	Activity and what the gateway has been doing
Updates	App and system updates. See Updates

Network



DHCP is the default. Switch to **Static**, enter address, prefix, gateway and DNS, then **Apply**. A static address stays fixed across reboots; if the address or gateway is wrong the gateway falls back to DHCP so you never lose access. **Renew lease** asks the router for a fresh address.

Backups

Export configuration downloads one `.json` with all your settings, rooms, devices and automations. **Import configuration** restores it, on the same gateway or a new one.

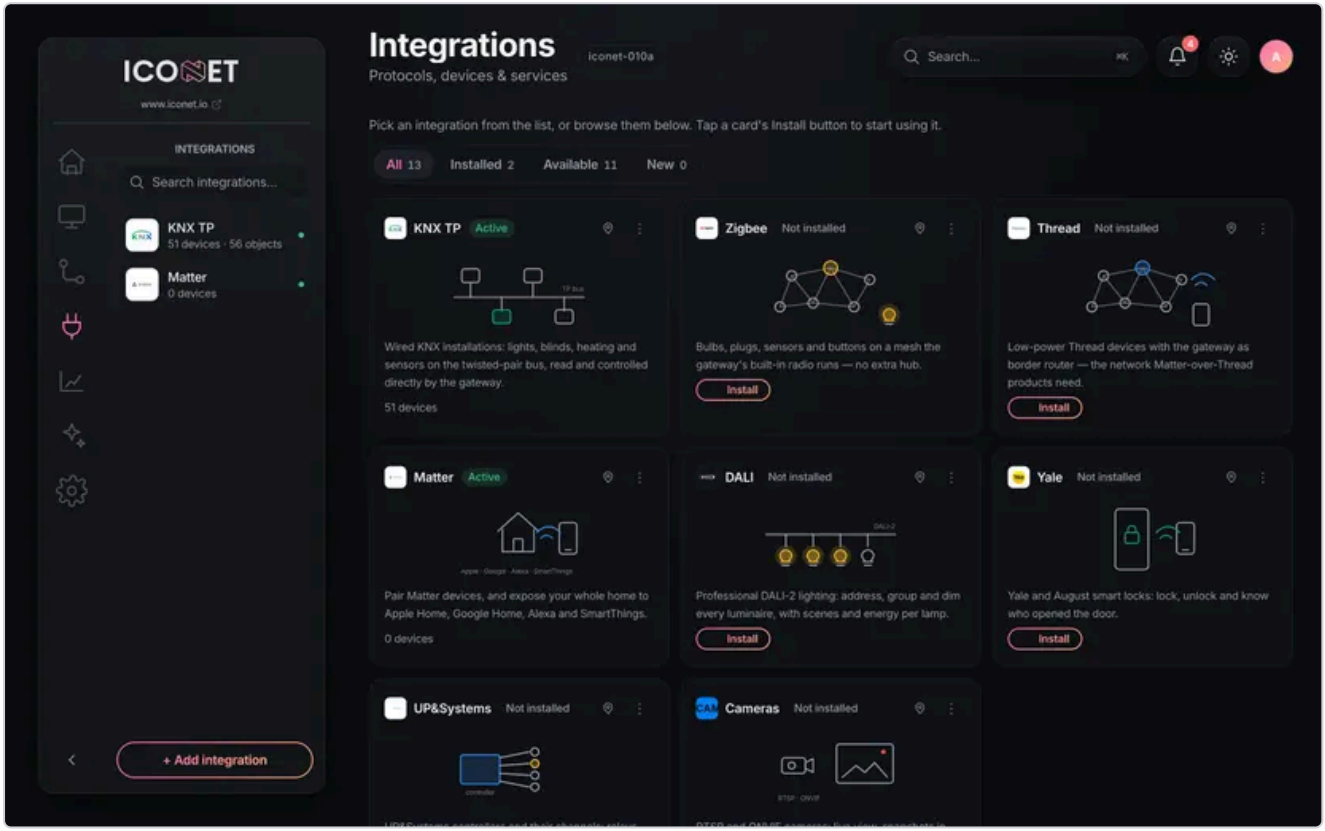
Factory reset

Settings › System › **Factory reset** erases every setting (network goes back to DHCP) and reboots. Devices on the buses are not touched; you will need to add integrations again.

INTEGRATIONS

Integrations

What the gateway connects to, and how every integration is added the same way.

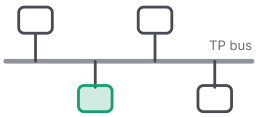


One catalogue

Open **Integrations**. Every protocol and service is a card with a drawing of what it brings and an **Install** button. Installed ones move to the left column, with a dot for their status and a count of devices. Tap a card to open it; use ⋮ to pin it to the sidebar, reload it or remove it.

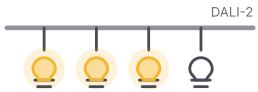
Buses and radios

KNX TP



Wired KNX installations: lights, blinds, heating and sensors on the twisted-pair bus.

DALI-2

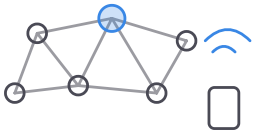


Professional DALI lighting: address, group and dim every luminaire, with scenes and energy per lamp.

Zigbee

Bulbs, plugs, sensors and buttons on a mesh the gateway's built-in radio runs.

Thread & Matter



Pair Matter devices over Thread with the gateway as border router, or over your network.

Third-party

Controllers and services from other makers, adopted over the network.

Cameras

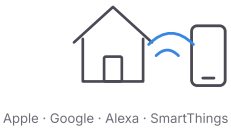
RTSP and ONVIF cameras: live view, snapshots in notifications, workflows when they go offline.

Services

Notifications

Telegram, WhatsApp, email, ntfy or any webhook: alerts, snapshots and daily summaries from workflows.

Matter Bridge



Your whole home in Apple Home, Google Home, Alexa and SmartThings.

MQTT

Publish every device to an MQTT broker, with Home Assistant discovery. Settings › MQTT.

The same page everywhere

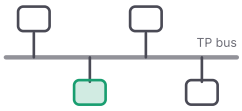
Every integration opens with the same layout: status at the top, tabs (**Devices**, and what the integration needs — Objects, Monitor, Bridge, Settings, Updates), a list of devices on the left and the selected one on the right, where you name it, choose its type and room, and jump to its workflows. The primary action (**+ Add device**, **+ Add light**, **Scan**) is always in the same spot.

Updates

Integrations are updated with the app (Settings › Updates). Each integration's **Updates** tab shows its own components and versions.

INTEGRATIONS

KNX



The gateway on your KNX twisted-pair bus: devices, group addresses, monitor and ETS.

Connect

Wire the KNX bus to the KNX terminal (red to +, black to −). Install **KNX TP** from Integrations. The status pill turns **Bus connected** when the gateway sees bus voltage.

Devices

A KNX *device* in the gateway is a set of group addresses with a type: a light (on/off, dimmable, colour), a blind, a thermostat, a sensor, a switch.

1. **+ Add device**, pick the type and give it a name and room.
2. Enter its group addresses (write and, if different, status address) with the datapoint type (DPT). The gateway suggests the usual DPTs for the type.
3. **Save**. The device appears in Rooms and works immediately.

Open any device to rename it, change its room, **Edit addresses**, read a value from the bus to verify wiring, or **Create workflow** from its own events.

Import from ETS

··· › Import ETS project: choose the group-address export from ETS (XML or CSV) and the gateway creates the objects with their names and DPTs. You then turn objects into devices with one tap (**Create a device from this group address**) or use them directly in automations. **Export Group Addresses** writes them back out.

Objects

The **Objects** tab is the full library of group addresses: name, address, DPT, last value and when it changed. From each row you can set a value on the bus, read it, tag it, or **Automate** (opens Workflows with that address as the trigger). Virtual objects exist only in the gateway, handy as flags in automations.

Monitor

Monitor shows the bus live: every telegram decoded by DPT, filterable by address or name. Use it to confirm wiring, find unknown addresses and watch what a push-button sends.

ETS and other interfaces

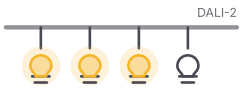
The gateway is also a **KNXnet/IP interface**: ETS can program the line through it, no extra interface needed. Enable it under **Settings** in the KNX page. The same tab checks for other IP interfaces on the network and for address conflicts on the line, and warns before they cause trouble.

Extensions

Additional KNX lines reachable over IP (remote segments) are adopted from the **Extensions** tab and appear as their own line.

INTEGRATIONS

DALI



A DALI-2 master in the gateway: commission, name, dim, group and scene every luminaire.

Connect

Wire the DALI line to the DALI terminal (polarity does not matter). **A DALI bus needs its own power supply**: the gateway does not power the bus, so install a DALI PSU on the line. Install **DALI-2** from Integrations; the status shows *Built-in DALI · 1 line* and whether the bus has power.

Find your lights

- **+ Add device** finds every luminaire that already has a short address and lists it, ready to add.
- **Commission new** addresses unaddressed gear (a new installation, or a driver you just added) and assigns free short addresses (0–63).
- **Add a light manually** if you already know its short address.

Each light gets a name and a room and shows up in Rooms right away. Open one to dim, set colour temperature on tunable-white drivers (**Warmer, relaxed** / **Cooler, brighter feel**), reassign its address, put it in a group (0–15), save a scene, or read energy and diagnostics.

Groups and scenes

Groups let one command move many luminaires at once; scenes store a level per light. Both are saved in the drivers themselves, so keypads on the same line keep working with them.

Sharing the bus

The gateway can be **Master (control)** or **Observer (listen-only)** when another control system already runs the line. Observer mode reads everything without interfering. The Setup panel tells you if it sees another master or collisions, and reminds you never to add a second power supply.

Push-buttons and sensors

DALI-2 input devices (buttons, occupancy, light sensors) send events that appear as triggers in Workflows.

Self-healing

If the bus receiver looks unhealthy the page shows *Degraded — self-healing*; the gateway recovers on its own and counts the recoveries so you can spot a wiring problem.

INTEGRATIONS

Zigbee

Bulbs, plugs, sensors and buttons on the gateway's own Zigbee network.

Turn it on

Install **Zigbee** from Integrations. The built-in coordinator forms a network; the status reads **Coordinator online**.

Add a device

1. Tap **+ Add device** — the network opens for joining for a few minutes.
2. Put the device in pairing mode (usually a reset or a long press; see its manual).
3. It appears in the list, is identified automatically, and asks for a name and a room.

Mains-powered devices (bulbs, plugs) act as routers and extend the range; the list marks them *Router · repeats*. Battery devices show their level in the tile.

Everyday use

Devices live in Rooms like any other. Buttons and remotes appear as *Button / scene* devices whose presses (single, double, long) are triggers in Workflows.

Binding

Open a button and bind it directly to a light: the two then talk to each other even if the gateway is off. The **What is binding?** note in the page explains when it helps.

Firmware

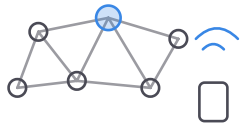
Open a device and tap **Check for update**; when an update is available it installs from the same page.

Removing

Remove device from the device panel. Remove a device before re-pairing it elsewhere.

INTEGRATIONS

Thread & Matter



Pair Matter devices over Thread, with the gateway's own border router, or over your network.

Two pieces

- **Thread** is the low-power radio network. The gateway includes a Thread border router: install **Thread**, and it forms a network (**Network active**) that Matter-over-Thread devices join.
- **Matter** is the standard the devices speak. Install **Matter**; the status reads **Controller ready**.

Pair a Matter device

1. In Matter › **Devices**, tap **+ Add device**.
2. Enter the device's 11-digit pairing code, or scan its QR code (it starts with `MT:`).
3. Keep the device close to the gateway for the first pairing. Thread devices join the gateway's own network automatically; IP devices must be on the same network as the gateway.
4. Name it, put it in a room.

Contact sensors, buttons, thermostats, lights, plugs and locks all appear in Rooms with the same tiles as everything else. Button presses become Workflow triggers.

Thread network

The **Thread** page shows the network topology (which node routes through which), lets you name nodes, and shows the network **Dataset** to share with another border router if you ever need one.

Sharing with Apple, Google, Alexa

That is the other direction, the **Bridge** tab: see Smart home apps.

Tips

- Battery devices sleep; their tile shows the last value with its age.
- If a device won't pair, factory-reset it (see its manual), wait a minute and try again.

INTEGRATIONS

Third-party integrations

Controllers and services from other makers, adopted over the network and used like everything else.

What they are

Besides its own buses and radios, the gateway talks to controllers and services from other makers over the network: relay and dimmer controllers, shutter controllers, smart locks, speakers, TVs. They appear in the Integrations catalogue as their own cards, and the list grows with app updates.

Adding a controller

1. Install the integration from the catalogue and tap **Find**. Every controller on the network that isn't adopted yet is listed.
2. Add the ones you want and tap **Done**.
3. Each controller shows its channels (relays, dimmers, shutters, inputs). Give them a room and they are ordinary devices in Rooms, Workflows and Trends.

Channel names belong to the controller: rename one here and the controller keeps the name; rename it on the controller and the gateway follows.

- **Calibrate shutters** learns each shutter's travel time so tiles show the real position and you can drag to any point.
- **Group channels as RGB/RGBW colour light(s)** turns three or four dimmer channels into one colour light.

Inputs

Inputs are hidden in Rooms by default (show them from the integrations menu). Presses and gestures on inputs are triggers in Workflows. Where the controller supports it, simple links (this input switches that relay) are written **inside the controller** and keep working with no network and no gateway.

Cloud services

Some integrations sign in to a maker's cloud (smart locks, for instance). You enter your account once; from then on the devices behave like local ones, with their state and battery in Rooms.

Offline

When a controller drops, its channels stay in the list and come back when it reconnects. Wireless controllers respond more slowly than wired ones; that is the controller's radio, not the gateway.

INTEGRATIONS

Cameras

RTSP · ONVIF

Any RTSP or ONVIF camera in your rooms, with snapshots in your notifications.

Add a camera

Install **Cameras**, then **Add camera**:

- **ONVIF (recommended)** — enter the camera's IP or host and its user and password. The gateway finds the stream itself.
- **RTSP** — paste the stream URL if you know it (for example `rtsp://user:pass@192.168.1.50/stream1`).

Give it a name and a room. Works with any brand: Hikvision, Reolink, Dahua, Axis and others. If the address or credentials are wrong the camera is saved anyway and comes online as soon as it is reachable.

In Rooms

The tile shows a fresh snapshot; tap it for the live view. Offline cameras are marked as such.

In Workflows

- **Trigger**: a camera goes offline.
- **Action**: send a notification with a snapshot (Telegram, WhatsApp, email...), for example when a door opens while nobody is home.

Everything runs on the gateway; video never leaves your network unless you send a snapshot yourself.

INTEGRATIONS

Notifications

Alerts, snapshots and summaries on Telegram, WhatsApp, email, ntfy or any webhook.

Install the channel you use from Integrations, fill in the fields, **Save**, and tap **Send test message**. From then on the channel is available as an action in every workflow.

Telegram

1. In Telegram, talk to **@BotFather**, create a bot and copy its token.
2. Paste the token in the gateway. Send any message to your new bot, then tap ✨ **Detect automatically** so the gateway picks up your chat ID.
3. **Send test message**.

WhatsApp

Uses the official Cloud API. Create a Meta Business app at developers.facebook.com, add the WhatsApp product, copy the *Phone number ID* and a permanent access token from API Setup, paste both plus your recipient number, add your own number as a test recipient and verify it. Proactive alerts outside a 24-hour window need an approved message template.

Email

Any SMTP server. Gmail: host `smtp.gmail.com`, port 587, and an *App Password* (not your normal password).

ntfy

Install the ntfy app, pick a topic name and subscribe to it. Put the same topic in the gateway: messages arrive as push notifications, no account needed.

Webhook

POST to any URL. Discord and Slack: paste the channel's incoming-webhook URL and the format is detected. Home Assistant, ntfy or a custom service: pick JSON or plain text.

Using them

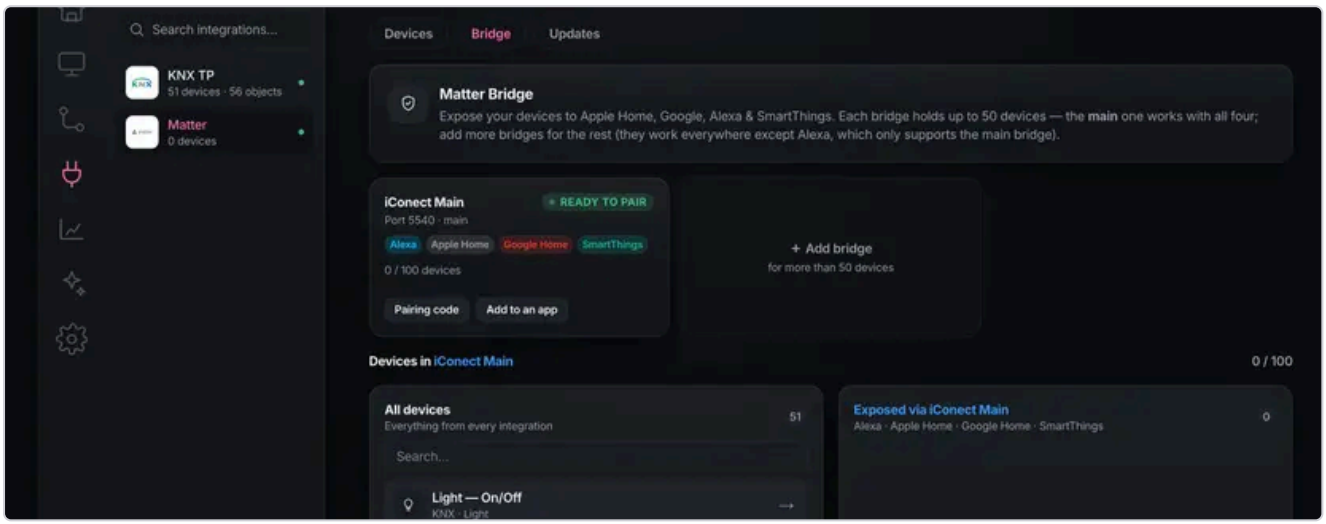
In Workflows, add the action **Send notification**, choose the channel and write the text. Device names, values and a camera snapshot can be included.

SMART HOME APPS

Smart home apps

Apple · Google · Alexa · SmartThings

Your whole home in Apple Home, Google Home, Amazon Alexa and SmartThings through one Matter bridge.



How it works

The gateway is a **Matter bridge**: whatever it controls (KNX, DALI, Zigbee, Thread, third-party systems…) appears in the apps as ordinary Matter accessories. Nothing goes through a cloud: the app talks to the gateway on your network.

1 · Choose what to expose

Open **Integrations › Matter › Bridge**. Drag devices from **All devices** into the bridge (or use →). You decide what the apps see; the rest stays private to the gateway. Each device shows how it will appear in the apps (a light, a blind, a thermostat, a sensor…).

2 · Pair with the apps

Tap **Pairing code**: a QR code and an 11-digit code appear. Then, in the app of your choice, add an accessory and scan or type the code. The same bridge can be paired with several apps at once (Matter multi-admin), so Apple Home, Google Home, Alexa and SmartThings all see the same devices.

- Apple Home
- Google Home

- Amazon Alexa

More than 50 devices

One bridge comfortably serves about 50 devices; that is also the limit Alexa accepts. **+ Add bridge** creates a second bridge with its own pairing code for the rest. Additional bridges work with Apple, Google and SmartThings; Alexa only pairs with the main one.

Starting over

Reset & re-pair all bridges wipes every pairing. Remove the bridge from the apps first, then pair again with a fresh code. Avoid reloading the bridge repeatedly: the apps may show "No response" for a few minutes while they rediscover it.

SMART HOME APPS

Apple Home

Add the gateway to the Home app and control everything with Siri.

You need

- An iPhone or iPad, and a home hub (HomePod, Apple TV) for automations and remote access.
- The gateway's pairing code: **Integrations › Matter › Bridge › Pairing code**.

Pair

1. Open **Home**, tap **+ › Add Accessory**.
2. Scan the QR code on the gateway screen (or tap *More options…* and type the 11-digit code).
3. Confirm the uncertified-accessory notice if it appears (the bridge is yours, on your network).
4. Assign the accessories to rooms as they are listed.

Use

- "Hey Siri, turn on the kitchen lights" · "close the blinds" · "set the bedroom to 21 degrees".
- Everything you exposed shows in its room; states update live whichever side changes them.

Tips

- Names in Home come from the gateway. Rename a device in the gateway and it follows.
- Scenes and automations built in Home run on your hub; the gateway's own Workflows keep running even if the hub is off.

SMART HOME APPS

Google Home

Add the gateway to Google Home and use Google Assistant.

You need

- The Google Home app on Android or iPhone; a Nest speaker or display works as the Matter hub.
- The gateway's pairing code: **Integrations › Matter › Bridge › Pairing code**.

Pair

1. Open **Google Home**, tap **+ › Set up device › New device**.
2. Choose **Matter device** and scan the QR code (or enter the code manually).
3. Pick a home and assign rooms.

Use

- "Hey Google, dim the living room to 30 %" · "open the blinds" · "what's the temperature in the bedroom?"
- Routines in Google Home can include any exposed device.

SMART HOME APPS

Amazon Alexa

Add the gateway to Alexa and control it by voice.

You need

- An Echo that acts as a Matter controller (most recent Echo models) and the Alexa app.
- The gateway's pairing code: **Integrations › Matter › Bridge › Pairing code**.

Pair

1. Open **Alexa**, go to **Devices › + › Add Device**.
2. Choose **Other › Matter** and scan the QR code or type the code.
3. Assign devices to groups.

Limits

Alexa accepts up to about 50 devices from one bridge and only pairs with the gateway's **main** bridge. Choose the devices you really use by voice in **Integrations › Matter › Bridge**.

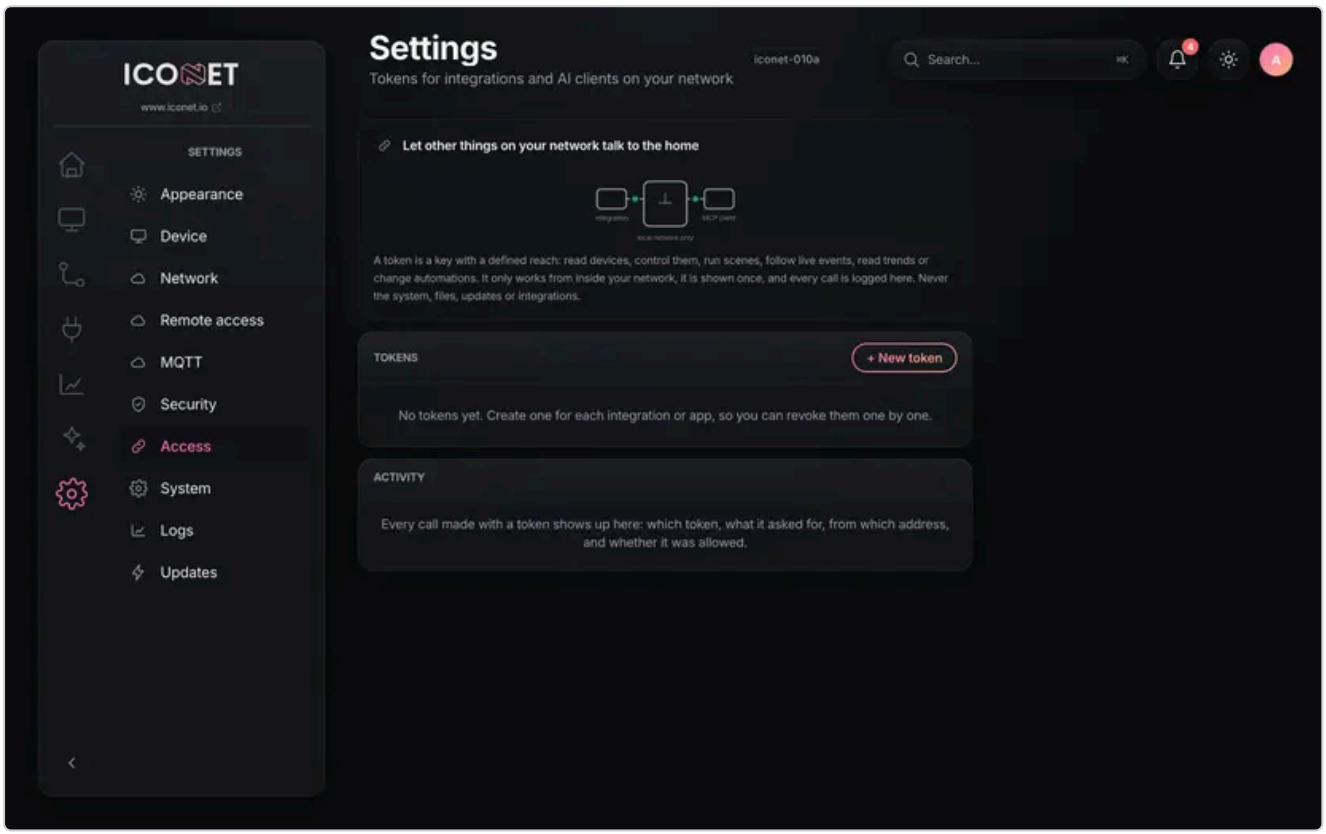
Use

- "Alexa, turn off the living room" · "set the thermostat to 22 degrees" · "lower the blinds".
- Alexa routines can trigger on exposed sensors (motion, contact).

ACCESS & API

Access tokens

Let an AI client or another app on your network talk to the home, within limits you set.

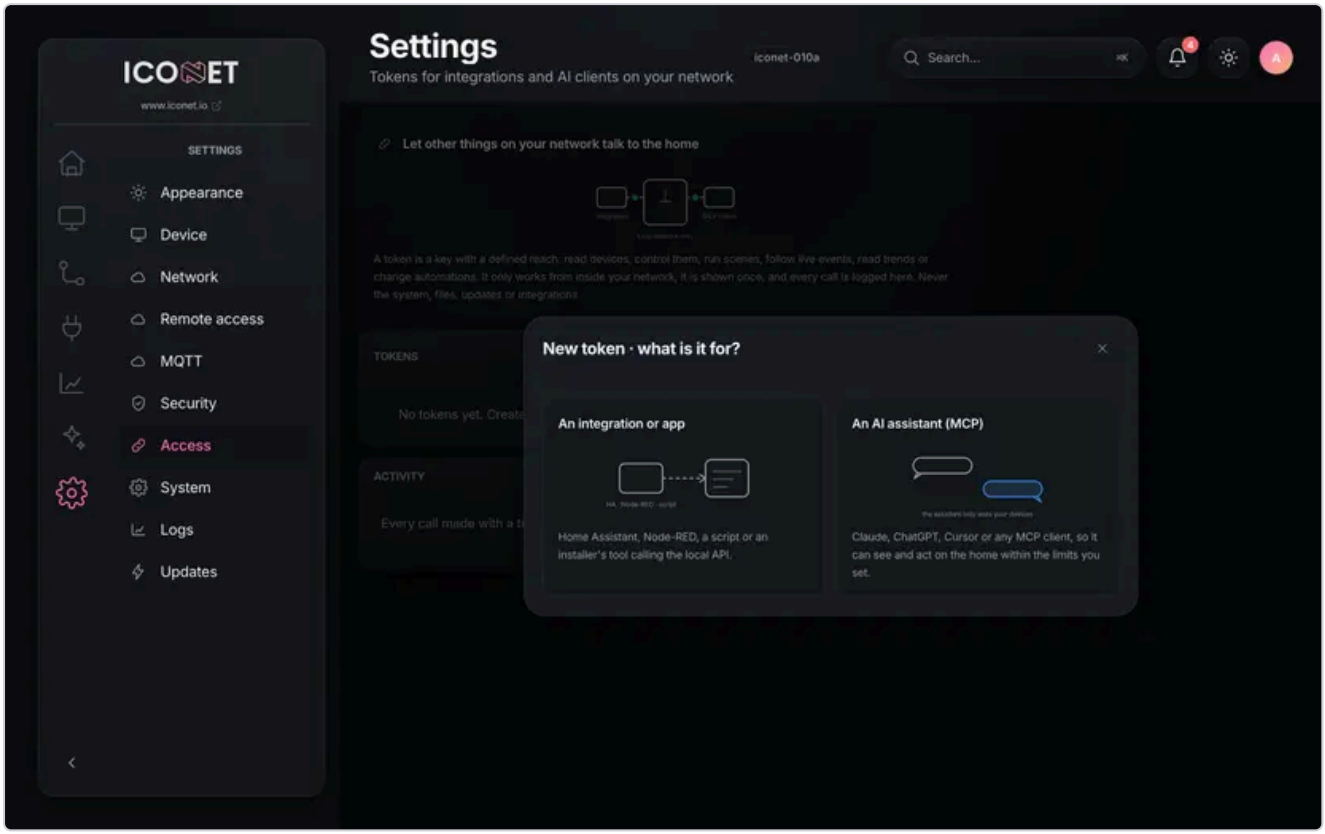


What a token is

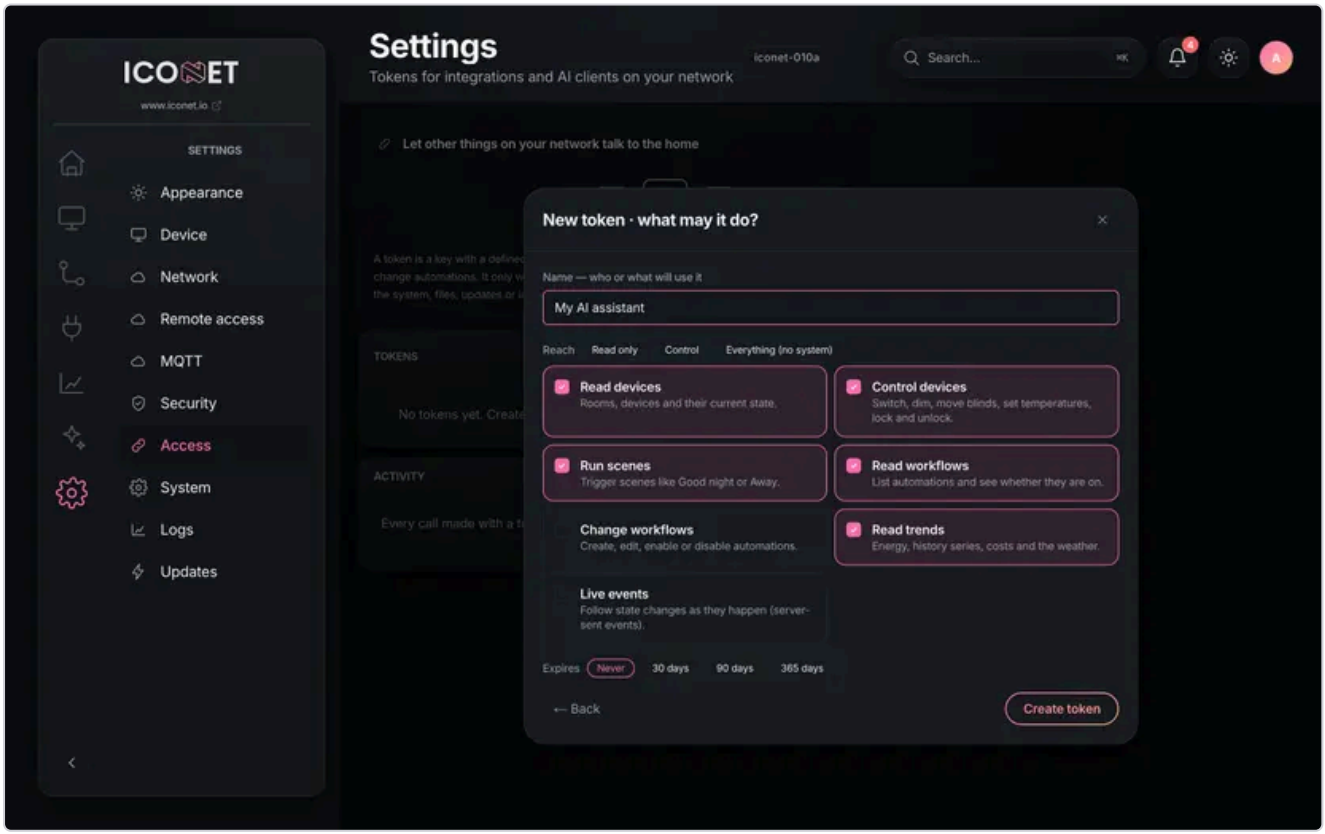
A token is a key for one app. Each has a name, a purpose, a list of permissions and an optional expiry, and you can revoke it alone without touching the others. Tokens work **on your local network only**, and every call made with one is written to **Activity**.

Create one

Settings › Access › + New token.

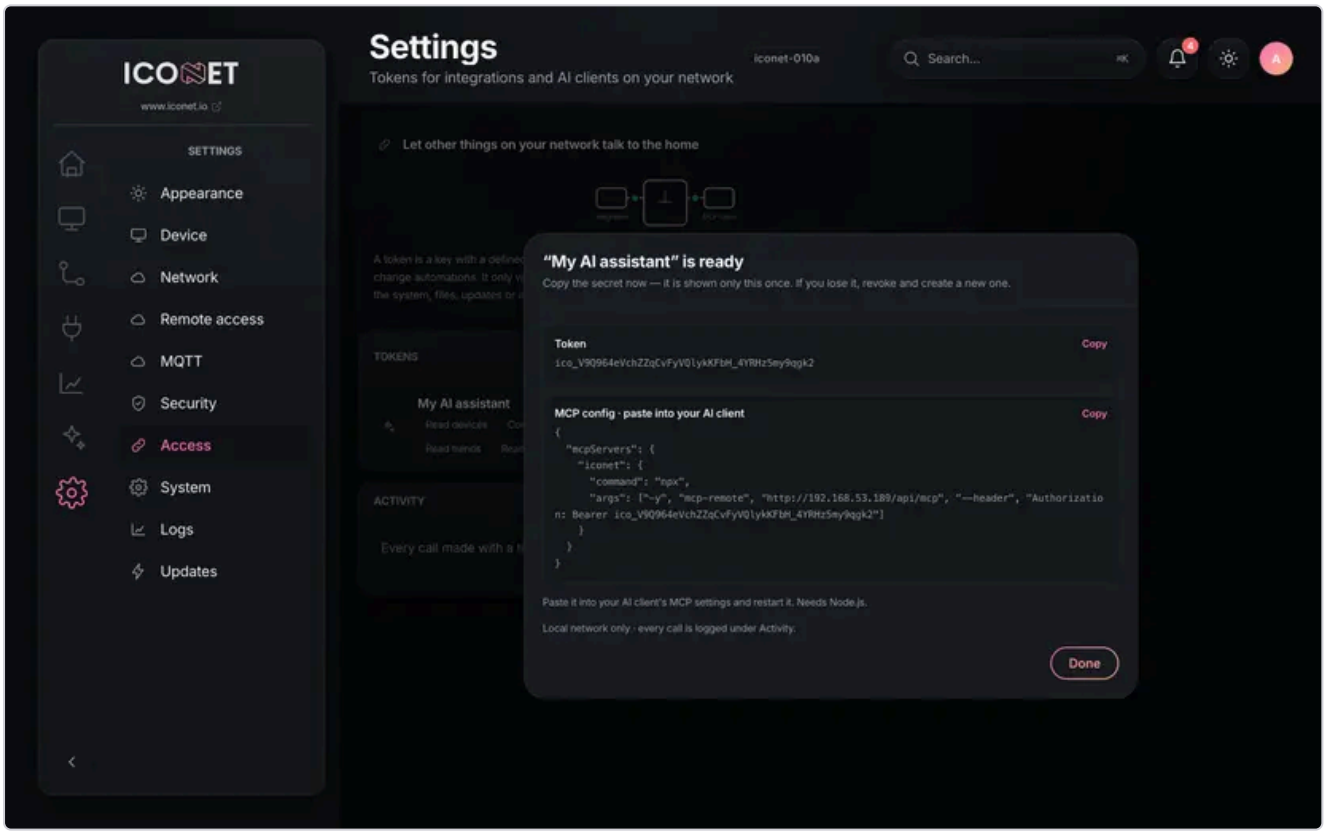


1. **What is it for** — *An AI assistant (MCP)* for Claude, ChatGPT, Cursor or any MCP client; *An integration or app* for Home Assistant, Node-RED, a script or an installer's tool calling the local API. Give it a name that says who will use it.
2. **What may it do** — tick the permissions:



Permission	Allows
Read devices	Rooms, devices and their current state
Control devices	Switch, dim, move blinds, set temperatures, lock and unlock
Run scenes	Trigger scenes like Good night or Away
Read workflows	List automations and see whether they are on
Change workflows	Create, edit, enable or disable automations
Read trends	Energy, history series, costs and the weather
Live events	Follow state changes as they happen

1. **Create token**. The secret is shown **once**: copy it now. For an MCP token you also get the ready-to-paste client configuration.



What a token can never do

Whatever permissions you tick, a token gives no access to the gateway's system, files, network settings, updates or user accounts. Those stay in the web app, behind your password.

Manage

- **Revoke** stops a token immediately; it stays in the list, marked *Revoked*, so its history remains readable. **Remove** deletes it.
- **Activity** shows every call: which token, what it asked for, from which address, and whether it was allowed.
- Set an **expiry** for tokens you hand to third parties.

If a secret leaks

Revoke it and create a new one. Nothing else needs to change.

ACCESS & API

Connect an AI client

Use Claude, ChatGPT, Cursor or any MCP client to see and run your home.

What you get

Your AI client gains a set of tools about your home, nothing else: rooms, devices and states, switching and dimming, scenes, automations, history and the weather. It can answer "is anything open?", turn things off, build an automation from a sentence, or tell you where yesterday's kWh went. It understands the names you use, in your language.

1 · Create an MCP token

Settings › Access › + New token, choose **An AI assistant (MCP)**, tick what the client may do, **Create token**. The sheet shows the secret and a configuration block:

```
{
  "mcpServers": {
    "iconet": {
      "command": "npx",
      "args": ["-y", "mcp-remote", "http://iconet.local/api/mcp",
               "--header", "Authorization: Bearer ico_…"]
    }
  }
}
```

2 · Paste it into the client

Every MCP client has an *MCP servers* setting. Paste the block, restart the client, and ask it something about your home. Node.js must be installed on that computer (the `npx` line runs a small connector).

Client	Where
Claude Desktop	Settings › Developer › Edit config
Claude Code	`claude mcp add` or `~/.claude.json`
Cursor	Settings › MCP › Add server
ChatGPT / others	Their MCP or "connectors" setting; the block is standard

If the client connects to `http://iconet.local` directly (no `npx`), it must support Streamable HTTP and send the same `Authorization` header.

3 · Try it

- "What's on right now?"
- "Turn off every light in the kitchen."
- "Every weekday at 07:00 open the bedroom blind."
- "How much did we consume this week compared to last?"
- "Is it going to rain? Should I close the awning?"

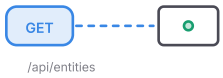
Automations the client creates arrive as **drafts** in Workflows for you to review and enable.

Limits, on purpose

- Works only on your local network. From outside, nothing answers.
- Only the permissions you ticked. Control needs *Control devices*; reading energy needs *Read trends*.
- The system, files, network and updates are never exposed, whatever the client asks.
- Every call is logged in **Settings › Access › Activity**.

ACCESS & API

Local API



A small HTTP API on your network for Home Assistant, Node-RED, scripts and installer tools.

Basics

```
http://iconet.local/api/…
Authorization: Bearer ico_…
```

Create the token in **Settings › Access** (*An integration or app*) with the permissions you need. All calls are JSON, on the local network only, and logged under Activity.

Devices

```
GET  /api/areas            rooms                      Read devices
GET  /api/entities         every device with its state  Read devices
GET  /api/entities/{id}    one device                 Read devices
POST /api/command          act on a device            Control devices
```

A device carries `id`, `entityId` (a readable alias like `light.kitchen`), `name`, `domain` (light, cover, climate, lock, sensor, switch…), `area`, `capabilities` and `state`. To act, send the device `id` and one of its capabilities:

```
POST /api/command
{ "id": "…", "capability": "on_off", "value": true }
```

Capabilities follow what the device reports: `on_off` (true/false), `brightness` (0–100), `position` and `tilt` (0–100 for blinds), `setpoint` (target temperature), `hvac_mode`, `lock` (lock/unlock), `activate` (scenes and buttons).

Live events

```
GET /api/events            server-sent events         Live events
```

A stream of state changes as they happen. Point an EventSource at it and keep the header.

Workflows

```
GET    /api/workflows          list                        Read workflows
GET    /api/workflows/{id}     one workflow                Read workflows
PUT    /api/workflows/{id}     create or edit (enable, disable) Change workflows
DELETE /api/workflows/{id}     delete                      Change workflows
POST   /api/workflows/{id}/run  run it now                 Change workflows
GET    /api/workflows/log      recent runs                 Read workflows
```

A workflow is a JSON document with `name`, `enabled` and its `flow` (nodes and edges). The easiest way to get the shape right is to build one in the app and read it back with GET.

History and weather

```
GET /api/series?ids=…&keys=…&since=…&until=…&res=…   Read trends
GET /api/insights                                   Read trends
GET /api/weather                                    Read trends
```

`series` returns time series for the devices and keys you ask for; `insights` the energy totals of the current ranges; `weather` the forecast for the gateway's location.

Try it

```
curl -H "Authorization: Bearer ico_…" http://iconet.local/api/entities
```

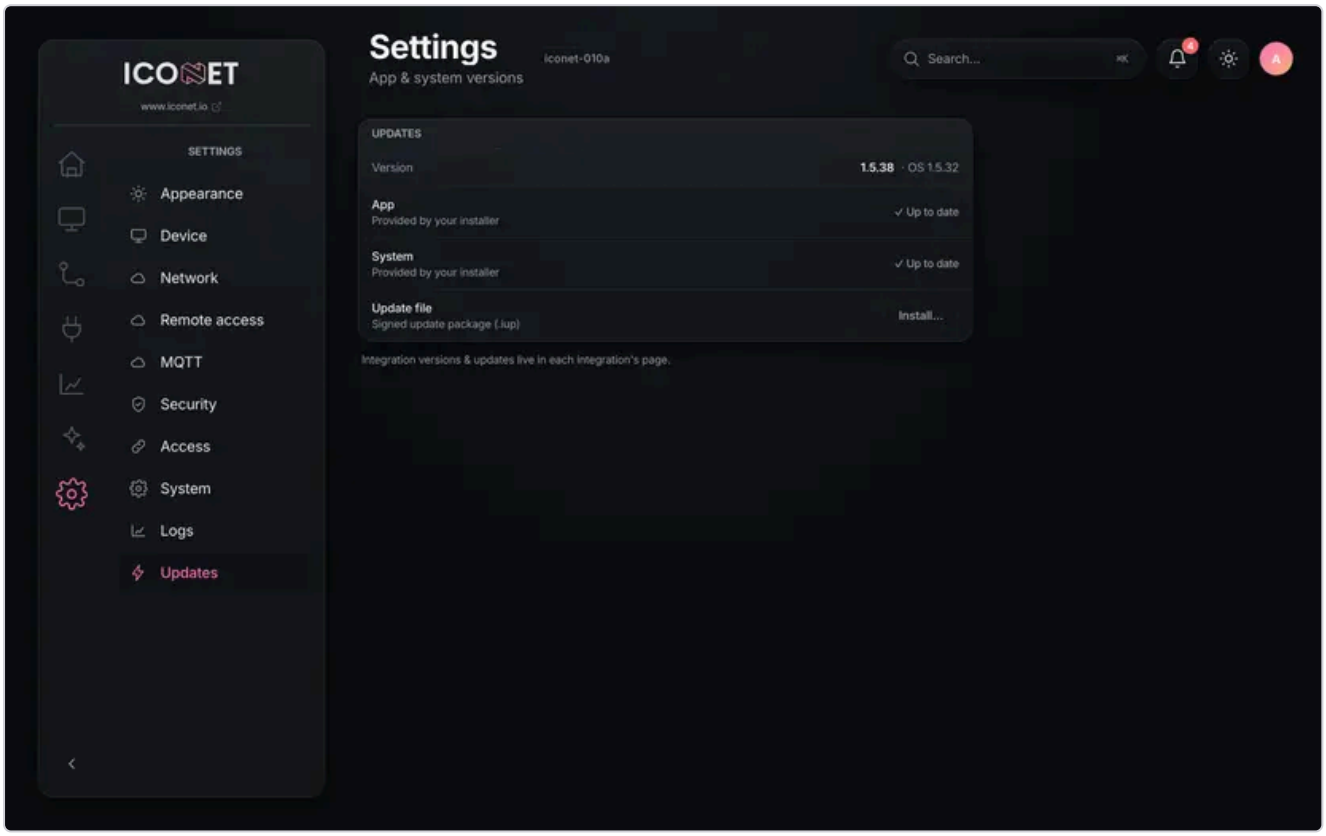
Home Assistant

A `rest_command` with the same header gives you any device from an HA automation; **Settings › MQTT** is the richer path (all devices discovered automatically).

ADVANCED

Updates

Keep the app and the system current, safely.



Two kinds

	App	System
What	The web app, the core and every built-in integration	The full operating image
How	Installs in the background, no restart	Installs to a spare slot, restarts, verifies itself
If it fails	Returns to the previous version automatically	Boots the previous image automatically

Your settings, devices, rooms, automations and history are kept in both cases.

Online

Settings › Updates › Check for updates. When a version is available its notes appear; tap **Update** (App) or **Update system**. Don't power the gateway off during a system update; the front LEDs and the app show progress.

From a file

Without internet, or when your installer hands you a package: **Update file › Install…** and choose the signed `.iup` package. Packages are signed; a modified or foreign file is rejected (*Package rejected*).

Integrations

Built-in integrations ride along with the app update. Each integration's **Updates** tab shows its own components and versions.

Version

The current app and system versions are at the top of the Updates page, and in Settings › Device.

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Troubleshooting

The few things that go wrong, and what to do.

I can't open iconet.local

- Try the IP address instead: your router's device list shows it as **iconet** (or the hostname you set).
- Check the Ethernet link light; on PoE, check the port delivers power. Give it a minute after power-up.
- Some networks block mDNS between wireless and wired segments: use the IP, or set a static one in Settings › Network.

I changed to a static IP and lost it

If the address or gateway you typed was wrong, the gateway falls back to DHCP on its own so you keep access. Look it up in the router again.

A device says Offline

- **KNX**: the status pill must read *Bus connected*. Check the bus voltage and the terminal wiring; open **Monitor** to see whether telegrams arrive.
- **DALI**: *Bus has no power* means the external DALI power supply is missing or off. Never add a second one.
- **Zigbee**: battery devices report rarely; the tile shows the age of the last value. Mains devices that stay offline: remove and pair again close to the gateway.
- **Thread / Matter**: factory-reset the device and pair again; keep it near the gateway the first time.
- **Cameras**: wrong address or credentials. Edit the camera; it comes online by itself once reachable.
- **Third-party controllers**: wireless controllers answer slower than wired ones; a controller that dropped reappears when it reconnects.

Apple Home / Google / Alexa show "No response"

Wait a few minutes: after a bridge reload the apps rediscover it. If it persists, remove the bridge from the app, **Reset & re-pair all bridges** in Integrations › Matter › Bridge, and pair again.

The weather card is empty

Set the address in Settings › Device (or the wizard). The forecast needs internet and refreshes hourly.

An AI client can't connect

- Tokens work on the local network only: the client must be on the same network as the gateway.
- Check the token isn't revoked or expired, and that it has the permissions the request needs. **Settings › Access › Activity** shows every attempt and why it was refused.
- The `npx` connector needs Node.js on that computer.

Something else

Settings › System › **Identify device** blinks the front LEDs so you find the right unit in a cabinet. **Reboot gateway** takes about a minute. **Export configuration** before any drastic step; **Factory reset** is the last resort.

Write to **support@iconet.io** with the serial number and versions from Settings › Device.

FAQ

Frequently asked questions

Short answers to the questions we get most.

General

Does it need the cloud?

No. Everything runs on the gateway. Internet is used only for updates, the weather forecast and the AI providers you choose to connect. Remote access through your Iconet account is optional.

Is there a subscription?

No. Updates are free.

Which phone app do I use?

Your browser. The web app adapts to phones, tablets and computers; add it to your home screen if you like. And through the Matter bridge everything also appears in Apple Home, Google Home, Alexa and SmartThings.

Devices

Can it run KNX, DALI and Zigbee at the same time?

Yes, and Thread, Matter, cameras and third-party integrations. Every device ends up in the same Rooms, Workflows and Trends.

How many devices?

KNX: as many group addresses as the line carries. DALI: 64 addresses per line. Zigbee and Thread: the usual mesh limits (dozens of devices per network). Matter bridge: about 50 per bridge, several bridges possible.

Do I need an external DALI power supply?

Yes. The gateway drives the bus but does not power it.

Can ETS still program my KNX line?

Yes. The gateway is a KNXnet/IP interface; ETS connects through it.

Automations

Do automations keep running if the internet drops?

Yes. They run on the gateway.

Can an AI create automations?

Yes, through the built-in assistant or any MCP client. They arrive as drafts for you to enable.

Privacy and security

Where is my data?

On the gateway. History, settings and automations never leave your network unless you export them.

What does an AI provider see?

The names and states of your devices, and your question. Never the gateway's system, files or network. Ollama on your own computer keeps even that at home.

Can someone on the internet reach the API?

No. Tokens work on the local network only, and every call is logged.

Updates

Will an update break my setup?

App updates install in the background and roll back by themselves if anything fails. System updates install to a spare slot and boot the previous one if the new one doesn't come up. Your data is kept.