ClodPi Labs – ATOM Hub for Home Assistant

Quick Start Guide

Thank you for choosing ClodPi Labs!
We are proud to be part of your Home Automation.

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Please, read the instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, or maintain it.

Markings: The following symbols / special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
⚠️	Critical situation. Non-compliance, may result in property damage	RoHS COMPLIANT	Product complies with RoHS directives
ℹ️ Information	Refers to useful information during manipulations	🗑️	Do not dispose of with domestic waste
ATOM Hub For Home Assistant	Name / Type of the equipment	⏻	Power Status
12V - DC	Power Supply information	〜	Device network status
USB	Standard cable connection interface	RST	Reset the device
Ethernet	Internet supply		
For ecological reasons, this guide has been not printed on physical paper! In order to provide the most updated technical documentation, as well as considering and saving the environmental resources, ClodPi Labs is providing preferably "Online documentation".			

1. Product Introduction – ATOM Hub:

ClodPi Labs ATOM Hub For Home Assistant is an 'home automation hub' device that connects other smart devices on a home automation network and manages communication between them. Being a central home automation controller, an automation hub can avert traffic off your home Wi-Fi, reducing network crowding. Home Assistant is that automation hub that facilitates the dream of Home Automation.

An open-source and free application used for home automation and is a completely localized alternative to smart applications like SmartThings and Google Alexa. It allows you to control smart devices in your home, offering better security, greater reliability, and more flexibility than most of the cloud-connected devices and that too locally within your house/home.

2. Package Contents

Contains

ClodPi Labs ATOM Hub For Home Assistant comes with below contents:

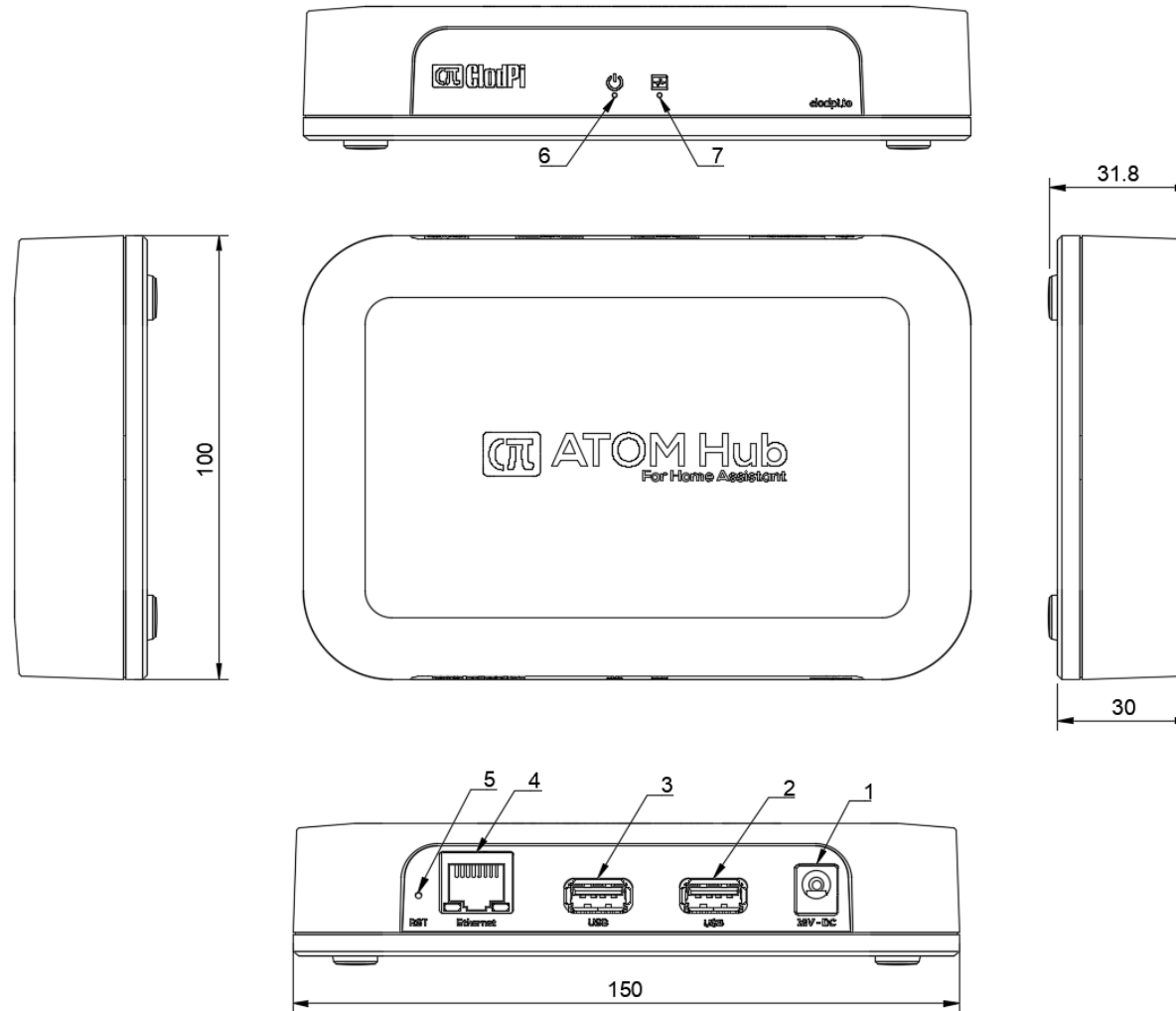|	
ATOM Hub Device (*preinstalled Raspberry Pi CM4 module*)	One
Power Adapter with power cord – two pole, Flat pin	One
10 Pin FRC/IDC Female to Female connector with Flat Ribbon Cable 10 cm	One
Card with QR Code (*scan to navigate to User Guide location*)	One

Note:
- ATOM Hub for Home Assistant is pre-loaded Home Assistant Operating System (HAOS).
- Battery is not included. You need to buy locally CR2032 battery and install.
- Installation and Other configurations like integrating Zigbee, Thread Matter step guides are available here.

3. Know your device

Sr No	ITEM / LABEL	QUANTITY	DESCRIPTION
1	12V-DC	One	Power supply – connect device using adapter
2	USB	One	Standard cable connection interface – allows to connect external module like
3	USB	One	Standard cable connection interface – allows to connect external module
4	Ethernet	One	Ethernet / Internet supply. *One needs to buy ethernet cable to connect the device with Home router*
5	RST	One	Push button to reset the device
6	⏻	One	Red LED - shows power status
7	⎍	One	Blue LED - blinking shows activity status

4. Settings guide and usage

a. Location

Find the best location for your device. The general advice is to avoid placing the device inside any metal box, basements, closed rooms, inside cabinets, where strength of the signal can become weak. Avoid exposing the device to direct sunlight as this may cause it to overheat.

b. Power on

- Take the 12V power adapter and plug it into the mains. Connect the adapter's DC Jack into the power jack located at the back side of the device.

⚠ DO NOT switch on the power unless Ethernet wire is connected to the device.

c. Ethernet

For wired ethernet connection, you need an ethernet cable to connect the router and the Ethernet connector jack located at the back side of the device.

- Switch ON the power.

- After connecting the power and Ethernet port, if the red light keeps on, it means the device is powered.

- The Blue LED will be on for some time and then go off.
- The blue LED light is on, whenever any network activity is going on. LED will remain off when there is no network activity.
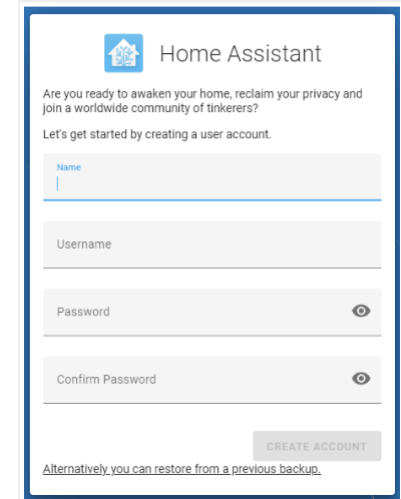

d. Indicator Light Description

LED Indicator	Description
Red	Device On
Blue	Activity

e. Onboarding Atom Hub device

Perform below actions to onboard and configure the device, create an administrator user, name your home, set the location and much more on to the **Home Assistant** platform:

- Notice the Red and Blue LEDs on the device are ON
- Take a laptop / smart phone
- Connect it to the same network as your ATOM Hub device is connected to
- On your Laptop / Smart phone, open a browser
- Enter: http://homeassistant.local:8123
- Home Assistant application Home page should open up as shown in adjacent image
- Follow the configuration steps as mentioned here: Home Assistant - Onboarding

Refer "**Useful Readings / References**" section for more details about 'Home Assistant – functionalities, usage, available integrations and much more.'

f. Reset the device (RST)

Press and hold the reset button (RST) on the device for more than 10 seconds. Release the RST button. This will restore the device to factory settings.

5. Technical Specification

Product name:	ATOM Hub For Home Assistant
Model:	V1.0
Processor & Carrier Board:	Raspberry PI CM4 - CM4104032 (pre-installed)
	Supports direct boot from NVMe devices
	Quad-core Cortex-A72 (ARMv8) 64-bit / 1.5 GHz
	4 GB RAM
	32 GB eMMC
	2.4 GHz, 5.0 GHz IEEE 802.11 b/g/n/ac WiFi

	Bluetooth 5.0, BLE
Integrated smart-home wireless (Silicon Labs MGM210P x 2):	
MGM210P - 1:	Supports Zigbee 3.0
	2.4 GHz radio with TX power up to +20 dBm
	1024 KB flash program memory, 96 KB RAM data memory
	Pre-installed with Zigbee 3.0 firmware (EZSP), can be upgraded
MGM210P - 2:	Supports Open Thread and Matter
	2.4 GHz radio with TX power up to +20 dBm
	1024 KB flash program memory, 96 KB RAM data memory
	Pre-installed with Open Thread, can be upgraded
Expansion slot:	NVMe M.2 SSDs socket M-Key
	Supports 2242, 2260, and 2280 modules
	PCIe x1
Ethernet:	Gigabit Ethernet
USB 2.0 Type-A host port:	Two
Push button:	Factory Reset (RST)
LEDs:	Red (Power), Blue (Status)
Battery:	RTC backed by CR2032 battery (*not included*)
Power Adapter:	Input: 100-240VAC 50/60Hz 0.6A max
	Output: 12.0VDC 1.8A 21.6W
	Type: barrel DC power jack
Enclosure:	150mm x 100mm x 30mm
	ASA plastic, White colour
	Accommodates custom heat sink (included)
Ingress protection:	IP40

Weight:	600 grams (approximately)

6. Caution ⚠️

- Only use for its intended use "Normal conditions of use".
- Changes or modifications to this product may lead to malfunction and must not happen.
- Only use the default accessories provided with the device.
- Do not use this product near water. It must not be exposed to dripping or splashing water or other liquids.
- Clean with a dry cloth only.
- Service should only be conducted by qualified personnel.
- Maintenance and repair must be carried out by qualified personnel
- Product must be installed on a non-flammable substrate (UL94V0). Refer to the installation instructions before powering up
- Do not drop on to hard surface, into fluid / fire.
- Operation is subject to the following conditions:
    - This device may not cause interference.
    - This device must accept any interference, including interference that may cause undesired operation of the device. This device must be professionally installed.

7. Disposal / Recycling

- Do not dispose of the product (device, adapter) with household waste. For proper disposal, contact any e-waste disposal company in your locality.
- The product packaging (cardboard and liners) can be removed with used paper.

8. Useful Readings / References

ClodPi Labs 'ATOM Hub or Home Assistant' is designed to work on Home Assistant Operating System [HAOS]. Before you decide to purchase and install Home Assistant compatible ClodPi's ATOM Hub device, please read through below information to understand Home Assistant, Hub and its nuances:

- Home Assistant - Home
- Home Assistant - Getting Started
- Home Assistant - Onboarding
- Home Assistant - Dashboard
- Home Assistant - Integrations

9. Support:

Email: sales@clodpi.io | support@clodpi.io

10. Policies:

Please refer the policies here:

Terms and Conditions | Terms of Service | Privacy Policy | Shipping Policy | Return and Refund Policy

11. Manufacturer:

ClodPi Labs (India) Private Limited,

2nd floor, No.25 & 26, Vivekananda Nagar, Electronic City - Phase 1, Bengaluru, Karnataka, India - 560100

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