3. Installation & Commissioning

Hardware manual

www.pinetek-networks.com

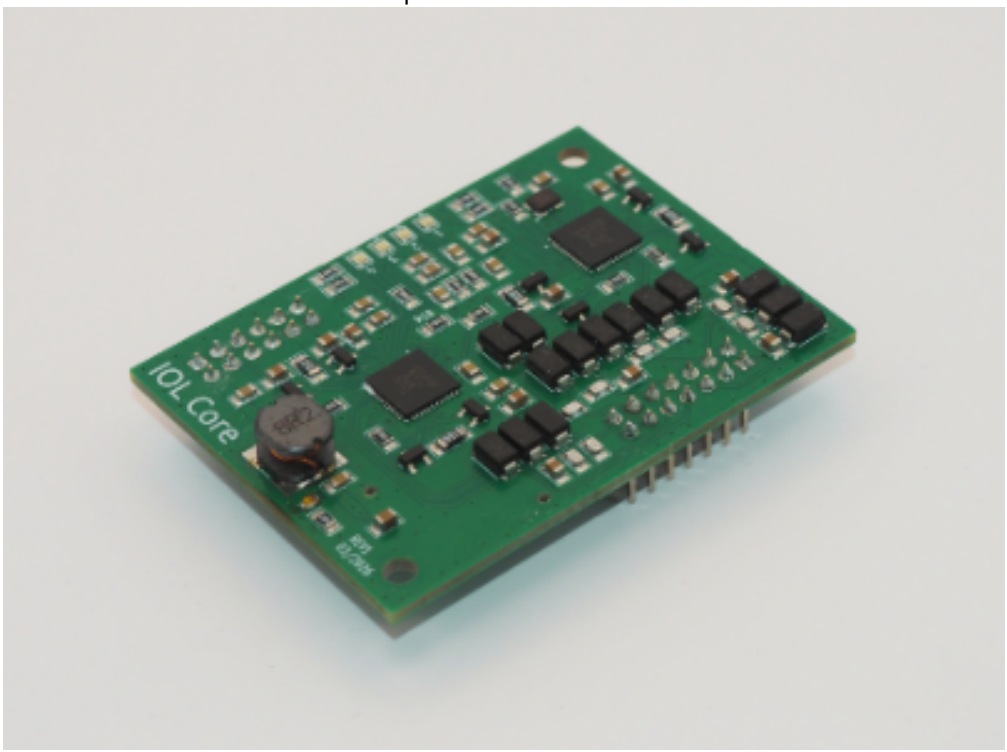


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3. Installation & Commissioning

Pinetek Insight is normally delivered pre-installed on the Pinebox. In that case, start at section 3.2 (connecting the Pinebox) and 3.5 (license activation).

3.1 Prerequisites

Item	Requirement
Pinebox	Pinebox with **Pinetek Insight** installed and licensed
Network	Clients need HTTP access to port `8000` of the device
Browser/End device	Current Chrome, Edge or Firefox

Network ports used by the system:

Port	Service
`8000`	**Pinetek Insight** web interface and API
`18080`	Pinebox data services (counters, timers, cycles) [PBX]
`18090`	Pinebox Software update manager

3.2 Connecting the Pinebox [PBX]

Install and configure the Pinebox as described in the Pinebox Manual: sensor wiring, counter/timer configuration and network setup are performed there.

For **Pinetek Insight** two things matter:

1. The Pinebox must be reachable over the network. In the standard single-device installation the Pinebox services run on the same host (`localhost:18080`).
2. The **counter keys** configured on the Pinebox [PBX] are what you will later map to process stages in **Pinetek Insight** (chapter 7.3). Note them down or use the built-in scan functions.



Pinetek Insight can read from several Pinebox devices simultaneously. Each counter, takt source and cycle station stores its own host and port.

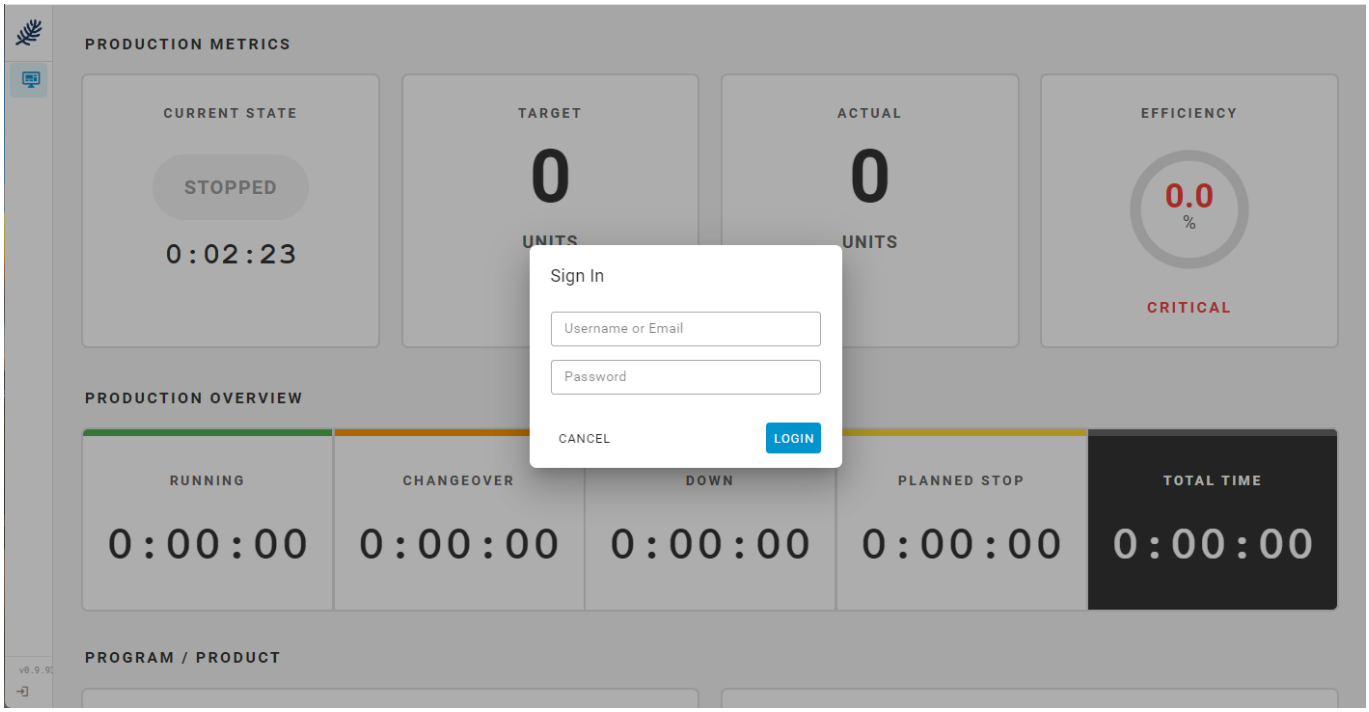
3.3 Installing Pinetek Insight

If the software is not pre-installed, install it from the Pinetek installation package following the instructions delivered with the package. The default installation system on the Pinebox is used (see Pinebox Manual, Configuration Update [PBX]). The pfw-File will:

- install system dependencies (including MariaDB if missing),
- create the database and application user,
- register **Pinetek Insight** as a `systemd` service, and
- start the service on port `8000`.

Please note that installation may take several minutes.

After installation, open `http://<device-ip>:8000` in a browser.

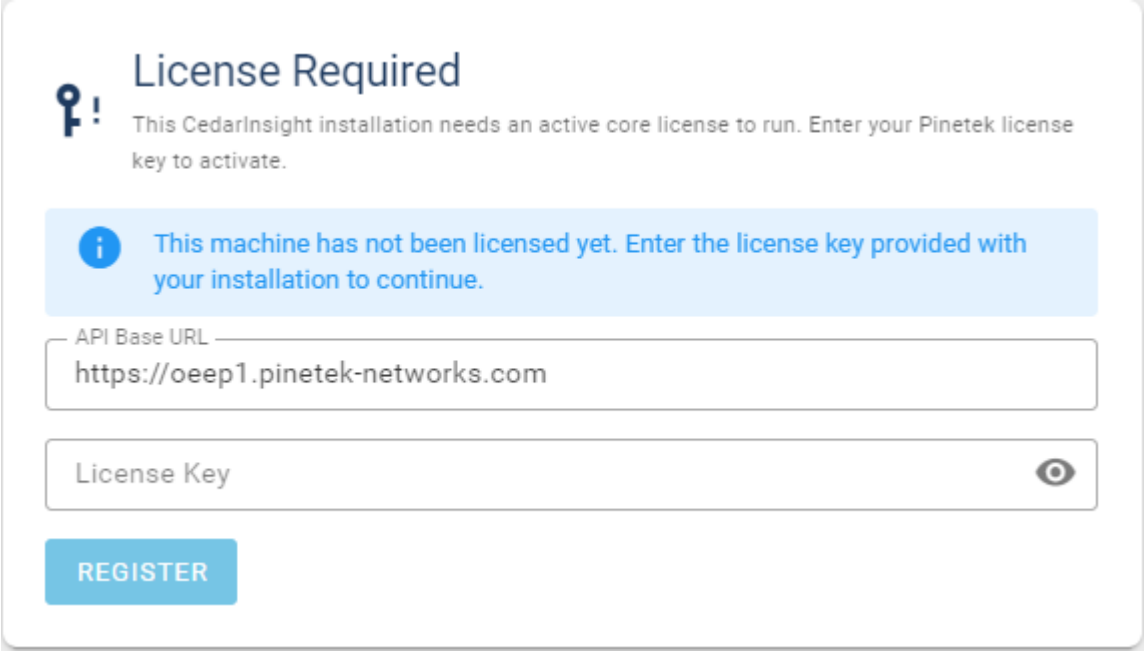


3.4 First start

On first start the application initialises its database automatically and seeds the defaults (timezone, predefined report blocks, default configuration). No manual database steps are required.

3.5 License activation

Pinetek Insight requires an active core license to run. Without it, the web interface shows only the **License Required** screen:



To activate:

1. Open the web interface. If the machine is not yet licensed, the License Required screen appears automatically.

2. Enter the **Pinetek license key** delivered with your installation.
3. Press **Register**. The device registers itself with the Pinetek license server using its unique machine ID.

The license is verified periodically in the background (once per day) and cached locally, so short internet outages do not interrupt operation. Optional features (Cloud Backup, AI Chat, managed SMTP) are separate entitlements on the same license, see chapter 9.6.



Registration requires internet access to the Pinetek license server. If the device is offline, contact Pinetek Networks.

3.6 Commissioning checklist

Recommended order for setting up a new line. Details for each step are in the referenced chapters.

1. License activated (3.5) and application reachable at `http://<device-ip>:8000`.
2. System settings: timezone and language (*System* → *System*, chapter 9.1).
3. Users created with appropriate roles (*System* → *Users*, chapter 9.2).
4. Counters discovered from the Pinebox and registered (*Line Config* → *Counters*, chapter 7.3). [PBX]
5. Program created: process stages defined and counters mapped, timeouts set (*Line Config* → *Program*, chapter 7.1).
6. Products created with part number and ideal cycle time (*Line Config* → *Product*, chapter 7.2).
7. Optional: sensors, takt sources and cycle stations registered and assigned (chapters 7.4–7.6). [PBX]
8. Downtime catalogue: categories and reasons defined (*Line Config* → *Downtime*, chapter 7.7).
9. SMTP configured and test mail sent (*System* → *SMTP*, chapter 9.4), required for e-mailed reports.
10. Report templates created or adapted (*System* → *Reports*, chapter 8).
11. Backup target configured and first backup executed (*System* → *Backup*, chapter 9.3).
12. Test run: perform a changeover, produce a few parts, verify state detection and counter values on the Production Timeline (chapter 5.2).