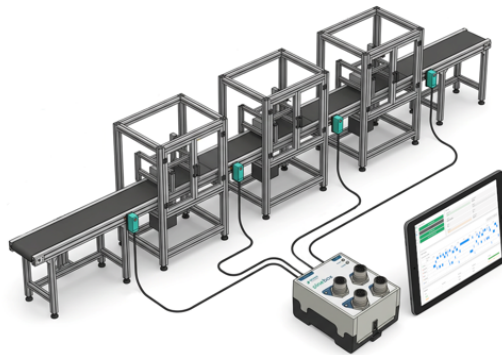


# 1. Introduction

## User manual

[www.pinetek-networks.com](http://www.pinetek-networks.com)





## Table of Contents

|                                            |   |
|--------------------------------------------|---|
| 1. Introduction .....                      | 5 |
| 1.1 About Pinetek Insight .....            | 5 |
| 1.2 Intended audience and user roles ..... | 5 |
| 1.3 Scope of this manual .....             | 6 |
| 1.4 Related documents .....                | 6 |
| 1.5 Typographic conventions .....          | 6 |
| 1.6 Notes and warnings .....               | 6 |



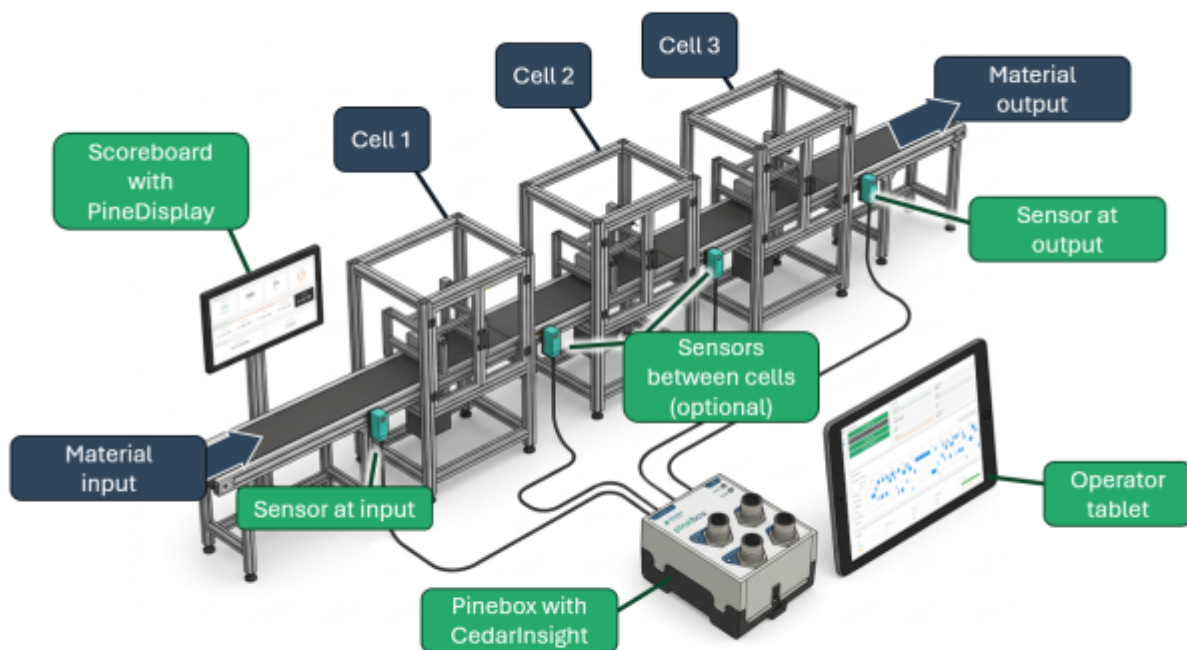
# 1. Introduction

## 1.1 About Pinetek Insight

**Pinetek Insight** is a manufacturing OEE (Overall Equipment Effectiveness) monitoring system by Pinetek Networks. It runs on the Pinebox, Pinetek Network's industrial edge device next to your production line and provides:

- Real-time production state tracking: the line state (Running, Down, Changeover, ...) is derived automatically from counter signals.
- OEE calculation: Availability, Performance and Quality per production run, aggregated over any time period.
- Downtime analysis: reason capture at the line, Pareto analysis, history drill-down.
- Bottleneck detection: live and historical, per process stage.
- Sensor, takt and cycle monitoring: throughput sensors, takt timers and energy-based cycle detection.
- Automated PDF reporting: run-end, scheduled or on-demand reports with e-mail dispatch.
- AI Assistant: chat-based analysis of your production data (licensed feature).

All data acquisition at the machine (counters, timers, sensor and cycle signals) is performed by the Pinebox core functions. **Pinetek Insight** consumes this data over the network and turns it into OEE metrics, analyses and reports.



## 1.2 Intended audience and user roles

This manual addresses three audiences, which correspond to the access levels in the application:

| Role              | Typical user                                                                        | Relevant chapters       |
|-------------------|-------------------------------------------------------------------------------------|-------------------------|
| <b>Operator</b>   | Line personnel: starts/stops runs, records downtime reasons, confirms notifications | 4, 5                    |
| <b>Supervisor</b> | Shift/production lead: analyses OEE, downtime and bottlenecks, configures the line  | 4..7                    |
| <b>Admin</b>      | Plant IT / system owner: installation, users, reports, backup, updates, licensing   | all, especially 3, 8, 9 |

A fourth level, Basic, is a view-only account for wall displays (Scoreboard only, no password).

## 1.3 Scope of this manual

This manual covers the **Pinetek Insight** application: its user interface, configuration and administration.

It does not cover the Pinebox device itself: wiring, IO-Link master configuration, counter/timer setup and device-level networking are described in the separate [Pinebox Manual](#).

## 1.4 Related documents

| Reference | Document                                           | Content                                                                                               |
|-----------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| [PBX]     | <a href="#">Pinebox Manual</a> (separate document) | Pinebox hardware installation, sensor wiring, counter/timer/cycle configuration, device network setup |

Throughout this manual, the marker [PBX] indicates that the described functionality depends on configuration performed on the Pinebox, described in the [Pinebox Manual](#).

## 1.5 Typographic conventions

- **UI elements** are written in bold: press **Save**.
- *Menu paths* are written as: *Line Config → Counters*.
- Monospace is used for values, keys, file names and URLs: `http:<device-ip>:8000`.
- [PBX] marks a cross-reference to the Pinebox Manual.

## 1.6 Notes and warnings



This symbol is used to show information that is relevant for the operation of **Pinetek Insight**.



This symbol is used to show areas of special attention that need to be considered for the safe operation of **Pinetek Insight**.