

IIOT DASHBOARDING — LAYER 0

Real-Time Visualization



Overview

The IIoT Dashboarding Module, integral to the Manufacturing Intelligence Platform (MIP) stack, provides immediate, real-time visualization of critical manufacturing data at the operational level. It operates seamlessly with MIP IIoT Core, leveraging pre-configured, edge-based machine learning models to deliver operator-centric insights without external networks or dynamic configuration.



Key Features

- Offline-capable edge deployment with persistent local display
- Pre-configured dashboards and KPIs tied to physical line context
- Visual status indicators, alerts, and shift-based summaries
- Native Parquet export and structured snapshot logging
- Modular display components integrated into the MIP stack

Use Cases

- Display live equipment and process status directly on the line
- Provide visual alerts and escalation for out-of-spec conditions
- Assist shift changes with fixed, location-based KPI summaries
- Support line audits and walkthroughs with persistent, contextual data
- Replace paper-based boards or manual logs with live visualization

How it Works

Dashboarding deploys as an edge-resident visualization interface, pre-loaded with dashboards tailored to each production area. It continuously pulls from MIP IIoT Core and presents data on fixed-location displays or mobile tablets, even in offline scenarios. Visual layers include trends, alerts, and machine states designed for fast operator comprehension.

Advantages

- Provides live, persistent data access to support shift handoffs and line checks
- Presents structured telemetry visually — bridging operator action and system state
- Improves situational awareness with always-on displays
- Enhances audit readiness with consistent, localized data presentation
- Operates offline with edge-cached dashboarding and Parquet export

