

EDGE ANALYTICS – LAYER 1

Real-Time Intelligence



Overview

The MIP Edge Analytics Module serves as the interactive layer of the MIP Stack, powered by the Visionary™ user interface (UI) to deliver dynamic dashboards, real-time key performance indicators (KPIs), and contextual alerts. Designed for secure access across mobile and fixed interfaces, it empowers frontline teams to observe and act at the edge, bridging the gap between situational awareness and adaptive control.



Key Features

- Visionary™ UI with role-based layouts and responsive design
- Live KPI rendering with trend visualization and deviation indicators
- Native feedback collection via operator comment interface
- Integrates with upstream Control and Batching modules
- Supports mobile, kiosk, and touchscreen deployments

Use Cases

- Monitor process variables for trends, drift, and anomalies in real time
- Deliver contextual KPIs to floor operators and supervisors
- Provide the UI/HMI interface for control layers
- Role-based customization, fluid mobile operator interface (Visionary™ UI)
- Capture operator observations and feedback via Visionary™ interface

How it Works

Edge Analytics processes real-time data streams to generate local KPIs, trend analysis, and anomaly flags. Through the Visionary™ UI, users interact with layered dashboards, submit observations, and access predictive context aligned with active control logic. This module acts as the insight engine between the operator and the system, and serves as the user interface foundation for future modules across the MIP Stack.

Advantages

- Delivers contextual HMI-style interfaces tailored to roles and workstations
- Enables real-time process visibility and deviation detection at the edge
- Reduces reliance on traditional alarm systems through preemptive insight
- Captures frontline feedback through embedded Visionary™ UI workflows
- Supports hybrid decision-making by surfacing both machine and operator signals