SmartIoT SYSTEMS

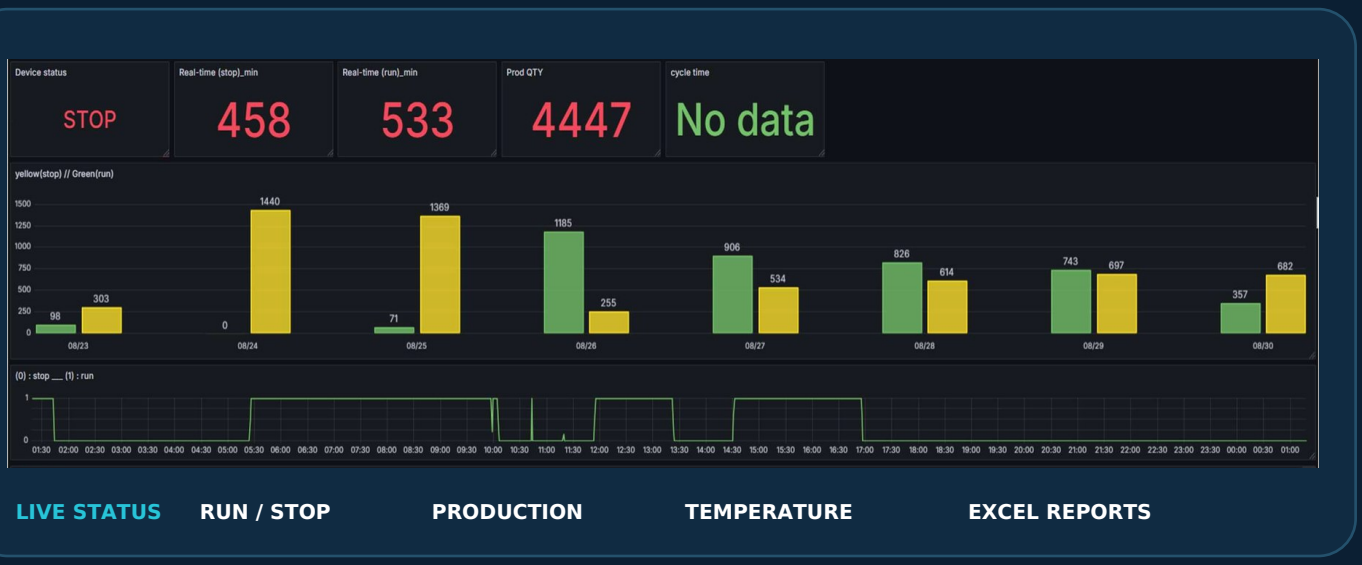
RETROFIT MACHINE

MONITORING

FOR INJECTION MOLDING

AND INDUSTRIAL EQUIPMENT

Turn existing machines into visible, measurable production assets - without replacing the machine controller.



LIVE STATUS | RUN / STOP | PRODUCTION | TEMPERATURE | EXCEL REPORTS

Mixed-brand machines | Real-time dashboard | Alerts & trends | Pilot-ready

SEE WHAT IS HAPPENING.

ACT BEFORE DOWNTIME BECOMES LOSS.

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FACTORY VISIBILITY

One monitoring layer for existing equipment

Capture the data operators and managers need - from individual machines to a plant-wide overview.

01

Reduce blind spots

Make short stops, idle time and recurring losses visible instead of relying only on manual records.

02

Protect equipment

Track temperature and other sensor signals to identify abnormal conditions earlier.

03

Simplify reporting

Collect production and machine data automatically for daily and weekly review.

04

Start small

Validate one machine first, then expand using the same data structure and dashboard.

WHAT CAN BE COLLECTED

1 **Run / stop / idle**

Digital I/O or machine signal

2 **Production count**

Shot or cycle pulse

3 **Cycle time**

Calculated from production events

4 **Temperature**

Motor, dryer, mold or process point

5 **Optional sensors**

Current, pressure, flow and alarms

6 **Reports**

Dashboard, TV view, Excel / CSV and alerts

RETROFIT APPROACH

Keep the machine. Add visibility.

The monitoring module reads available signals and sensors. The original machine controller remains in place.

SYSTEM ARCHITECTURE

From machine signals to decisions

A modular design supports mixed brands, local data collection and scalable monitoring.

01 MIXED-BRAND MACHINES









Run, stop, alarm and shot signals

02 DATA COLLECTOR



Edge PC / Gateway

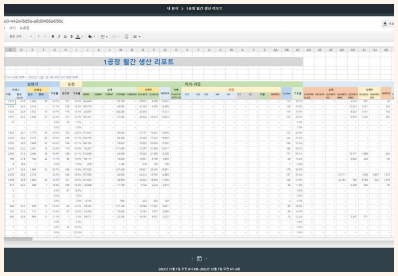
- Signal conditioning
- Sensor acquisition
- Local buffering
- Automatic restart

03 MONITORING & REPORTS



Live dashboard

PC, shop-floor TV and mobile-ready views



Reports & export

Shift / day / week / month review and Excel-ready data

Alerts | Trends

DEPLOYMENT OPTIONS

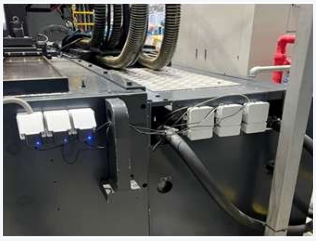
Local / on-premise | **Network-connected** | **Wired or wireless** | **Pilot to plant**

FIELD APPLICATIONS

Real equipment. Practical monitoring.

Examples from production environments show how targeted sensors and simple dashboards support maintenance and process control.

01 SERVO MOTOR THERMAL MONITORING





OPERATIONAL RISK

Overheating can precede unplanned stops and component damage.

MONITORING RESPONSE

Continuous temperature logging and threshold alerts support earlier maintenance action.

02 HOPPER DRYER TEMPERATURE





OPERATIONAL RISK

Manual checks can miss temperature drift and create gaps in resin-drying records.

MONITORING RESPONSE

Automatic monitoring keeps a time-stamped temperature history for process review.

03 CENTRAL RESIN / IMPELLER MOTOR





OPERATIONAL RISK

Filter blockage and overload can increase motor temperature and mechanical risk.

MONITORING RESPONSE

Temperature trends help identify abnormal operating conditions before major damage.

Note: Outcomes depend on machine condition, sensor placement, thresholds and site operation.

DASHBOARDS & REPORTS

The same data, from shop floor to office

Operators see current conditions. Managers review trends, downtime and production history.

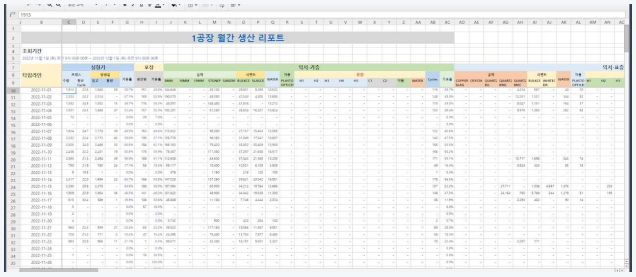


REAL-TIME OVERVIEW **Machine status** **Run / stop time** **Production count**



SHOP-FLOOR TV VIEW

Shared visibility for operators, supervisors and maintenance.



EXCEL-READY REPORTING

Time-stamped records for shift, daily and weekly analysis.

KEY OUTPUTS

Live status

RUN / STOP / ALARM

Downtime

Duration & frequency

Temperature

Trend & threshold

Production

Count & cycle

SmartIoT SYSTEMS

START WITH ONE

CRITICAL MACHINE

A focused pilot confirms signal availability, data quality and the operational value before a wider rollout.

01	**SELECT**	Choose one machine with frequent stops, manual records or temperature risk.
02	**CONNECT**	Install the module and required sensors without replacing the machine controller.
03	**VERIFY**	Compare live data with actual machine behavior and production records.
04	**EXPAND**	Add machines, dashboards and reports after the pilot is validated.

LET'S REVIEW YOUR MACHINE

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