

## WATCONNECT<sup>®</sup>

### Data Insights Package for L/XL Control Panels

Maximize system uptime, yield and reliability with our powerful **Data Insights** package. We analyze your **WATCONNECT**<sup>®</sup> control panel data to identify opportunities for enhanced efficiency. Receive a comprehensive quarterly thermal system report, providing valuable insights and actionable recommendations.

Seamlessly integrated into your panel, our monitoring capability has zero impact on system footprint. Your data remains secure with a read-only connection to the cloud via cellular connectivity.

#### What will **Watlow**<sup>®</sup> deliver?

- Review and analysis of the data conducted by a data scientist and thermal system expert
- Comprehensive quarterly thermal system report showing time series graphics, statistical data, anomalies and an executive summary including insights and recommendations for system improvement
- Collaborative touchpoints, engineer-to-engineer, to review the data and develop context

#### What analysis is included?

##### Power and temperature controller health

- Prevent unplanned downtime and perform maintenance as-needed by ensuring basic functionality of system components

##### Failed element detection

- Prevent unplanned downtime, pre-order replacement elements and schedule maintenance activities in advance

##### Process continuity (process drift)

- Improve system reliability by monitoring process drift over time; this gives visibility to changes in the system that can prompt maintenance activities to avoid unplanned downtime

##### Environmental controls within the panel (optional)

- Monitor panel environmental data to alert to changes in environmental conditions that could lead to a failure

##### Optically decoupled monitoring of field wiring terminals (optional)

- Extend system life and optimize maintenance schedules by monitoring terminal temperature to determine when maintenance is needed to tighten the terminals

### Smart Services



Utilize data from connected products in the field to improve our customer's performance and efficiency.



## What data will be collected?

Power, current, voltage, SCR/controller alarms, process values, set point, panel environmental data and wiring terminal temperatures (based on panel configuration)

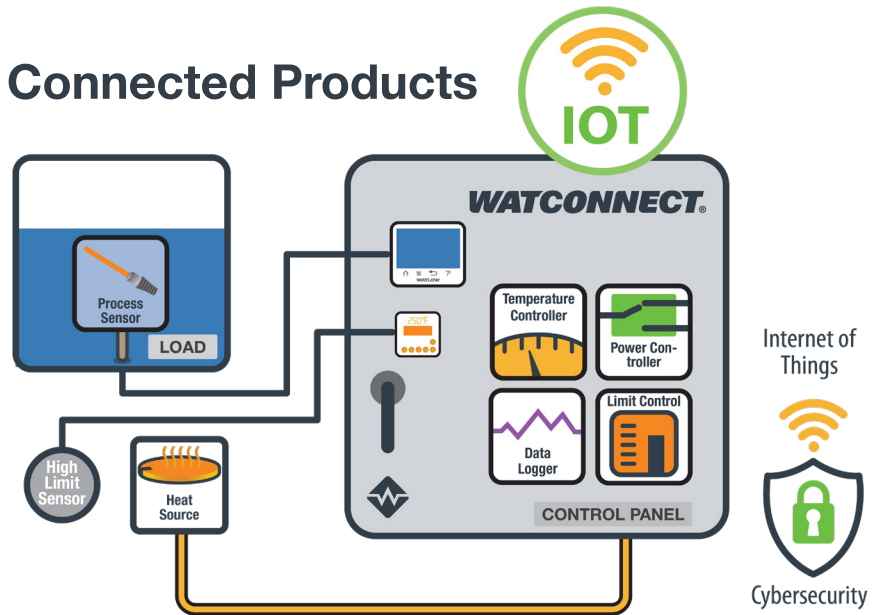
## How will the data be collected?

The panel will include a Eurotech cellular gateway device. This device will pull the desired data from the controllers via Modbus<sup>®</sup> TCP/Modbus<sup>®</sup> RTU, aggregate the data and send it to the secured cloud via one-way only MQTT communications; a differential cellular network connection is enabled through two antennae installed on top of the panel; the device follows EN 62368-1:2014 safety standards and is rated for both RED (EU wireless comms) and FCC/ISED (NA wireless comms)

## Will my system remain secure?

The connected panel protects the customer control system by limiting communications to read-only access; the operation of the data monitoring system will have no effect on the performance of the thermal system; our IoT architecture has been designed with cybersecurity in mind

## Connected Products



**Smart systems utilize data and analytics to improve overall system performance in real-time.**

### Protection at the device level with Eurotech's RELIAGATE 10-14 gateway

- Adheres to IEC 62443-4-1/2 cybersecurity standard and PSA Level 1 certification
- Compliant with California SB-327 password law
- Hardware support for TPM 2.0, Secure Boot
- Always-on physical anti-tampering monitor/logger that is active even when system is removed from power

### End-to-end encrypted connection between device and Azure IoT Hub

- One-way only communication to the cloud, no access to write control parameters
- Data encrypted using SHA-256 encryption
- SSL/TLS certificate for Device to Cloud connection

### Secured and encrypted data throughout Azure cloud environment

- SAML authentication on cloud architecture
- User authentication required at all end points with limited access and dedicated administrative accounts
- Private end point database
- AES-256 encrypted data storage

