Rockwell Automation

# DEVICE OBJECT LIBRARIES

# APPLICATION CODE LIBRARIES

**Reduce risk & time to value with free reusable AOI and HMI faceplate code libraries**

BEGIN

# Device Object Libraries

REDUCE RISK & TIME TO VALUE WITH FREE REUSABLE AOI & HMI FACEPLATE CODE

## Consistency

**Unified look and feel** across many machines and facilities or delivery partners

Easily follow **ISA 101.1 HMI Standards**

**Build complex control strategies** out of basic instructions and devices

Use alongside other Rockwell libraries including **PlantPAx** and **Machine Builder**

## Speed

**Accelerate project development** with modular code and HMI libraries

Use with **Studio 5000® Application Code Manager** for bulk project configuration

**Reduce downtime** by providing useful information to operators and maintenance

Ease of **commissioning and configuration**

## Support

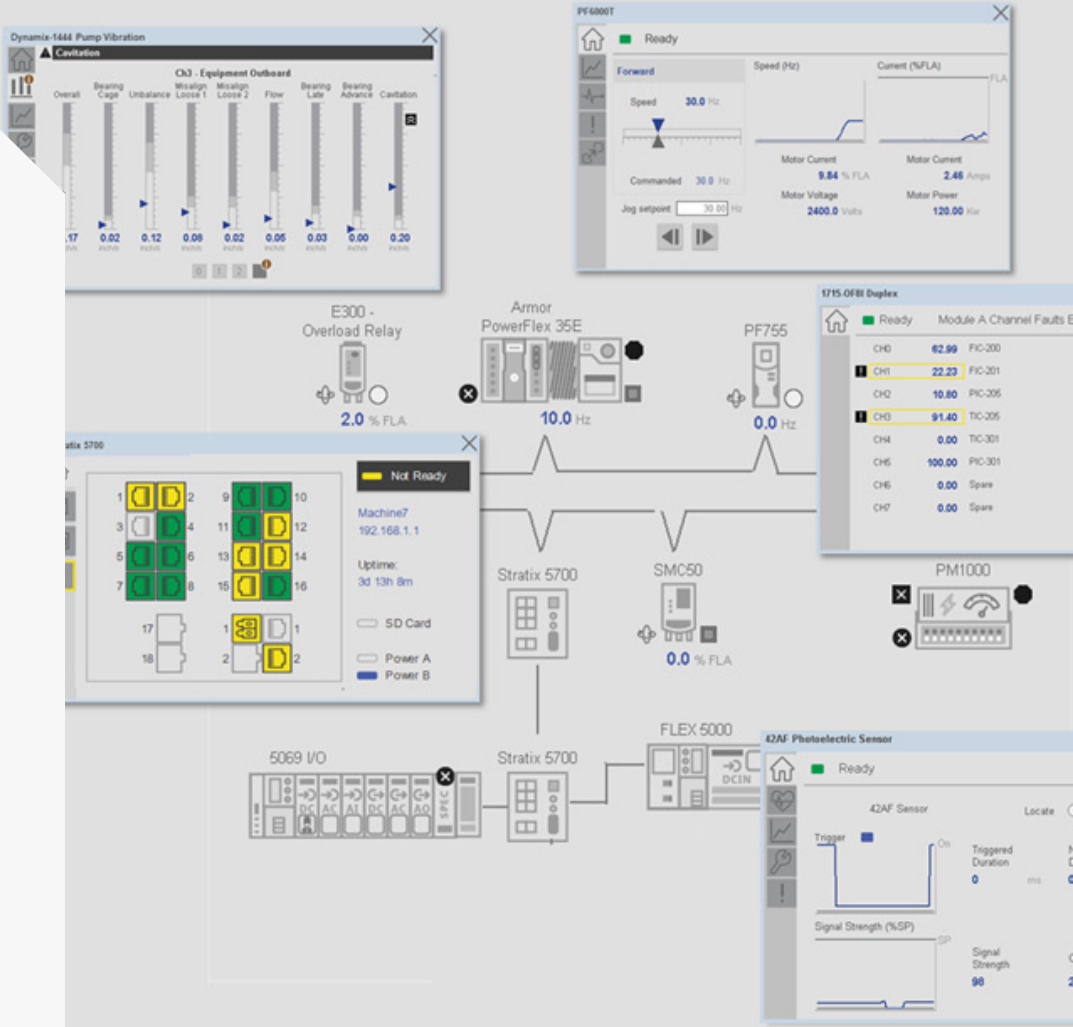
**Tested & documented**

**Supported** by TechConnect and KnowledgeBase Globally

**No-charge** and open for use by any Rockwell System Integrator or end-user

**Lifecycle** managed

Use with **FactoryTalk® View ME/SE**, or **Studio 5000 View Designer®**




Leverage **information**, **diagnostics**, and **predictive indicators** from Rockwell's Intelligent Devices portfolio including **motor control**, **networking**, **I/O**, and **sensor hardware**.

# Power Device Library

## HMI FACEPLATES AND ADD-ON INSTRUCTIONS FOR MOTOR CONTROL AND ENERGY MONITORING

### Discrete Devices

E300™ Electronic Overload Relays

SMC™-50, SMC™ Flex Soft Starters

ArmorStart® 280/281/290/291

### Velocity Drives

PowerFlex® 525/753/755/755T/6000T/7000

ArmorStart® 284/294

Armor PowerFlex® 35E/S

### Motion Drives

Kinetix® 350/5100/5300/5500 /5700/6500

PowerFlex® 527/755CM

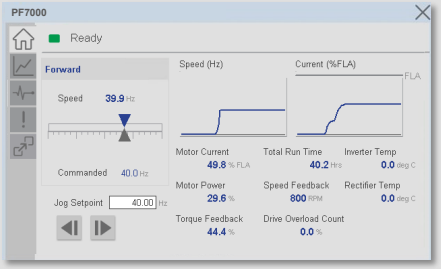
### Power & Energy

PowerMonitor™ 500/1000/5000

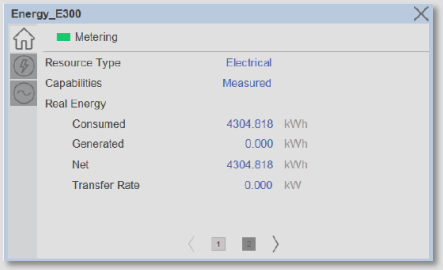
Energy Monitoring for E300™, SMC™-50, SMC™ Flex, PowerFlex® 525/527/755, Kinetix® 5500/5700

### Special Features:

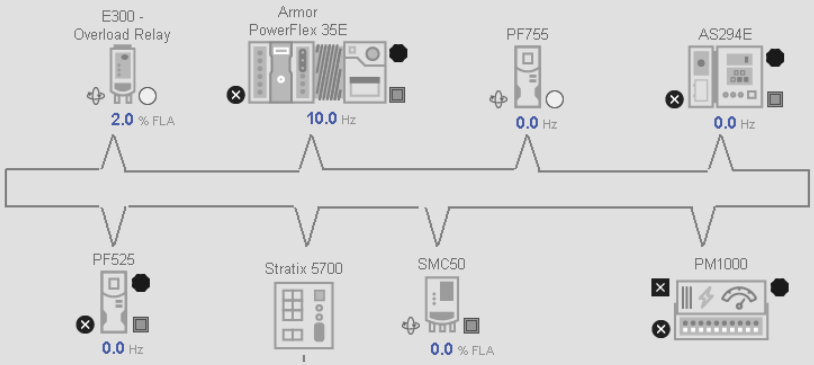
- Common programming interfaces
- Integrate with PlantPAx and Machine Builder Libraries
- Device diagnostics and predictive maintenance
- Simplify commissioning and troubleshooting
- Track last 4 faults with recommended corrective actions
- Graphical symbols for creating system displays
- Use with **Studio 5000® Application Code Manager**

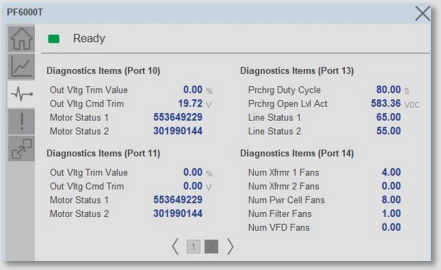



PowerFlex® Drives

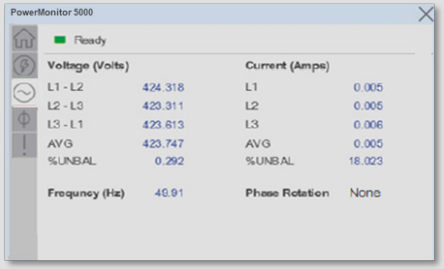



Energy Monitoring

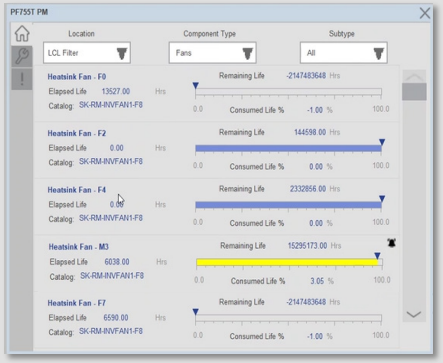



Detailed Diagnostics




PowerMonitor




Predictive Maintenance

# Network Device Library

## HMI FACEPLATES AND ADD-ON INSTRUCTIONS FOR STRATIX® SWITCHES AND NETWORK MONITORING

### Stratix® Switches

Stratix® 2500, 5200, 5400/5410, 5700 (Standard/Armor), 5800

Port layout, status, statistics, configuration

Switch information and diagnostics

Fault history with corrective actions

### Device Level Ring (DLR)

Single, triple, or ring of switches

Automatic ring network layout

Fault location monitoring

Node information

### Parallel Redundancy Protocol (PRP)

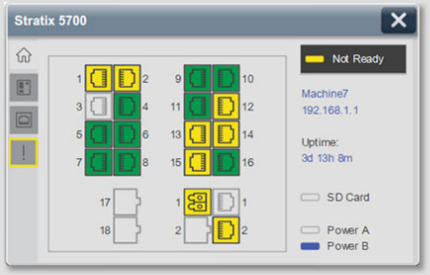
List all nodes and types (SAN/DAN/VDAN/Redbox)

Monitor LAN A/B Status

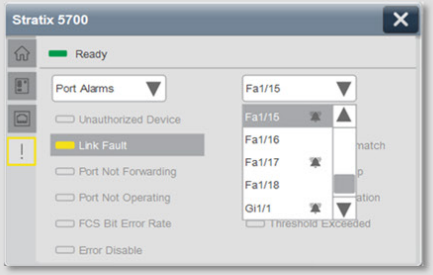
View node information and diagnostics

### Special Features:

- Use with PlantPAx and Machine Builder Libraries
- Device diagnostics
- Simplify commissioning and troubleshooting
- Graphical symbols for creating system displays
- Use with **Studio 5000® Application Code Manager**

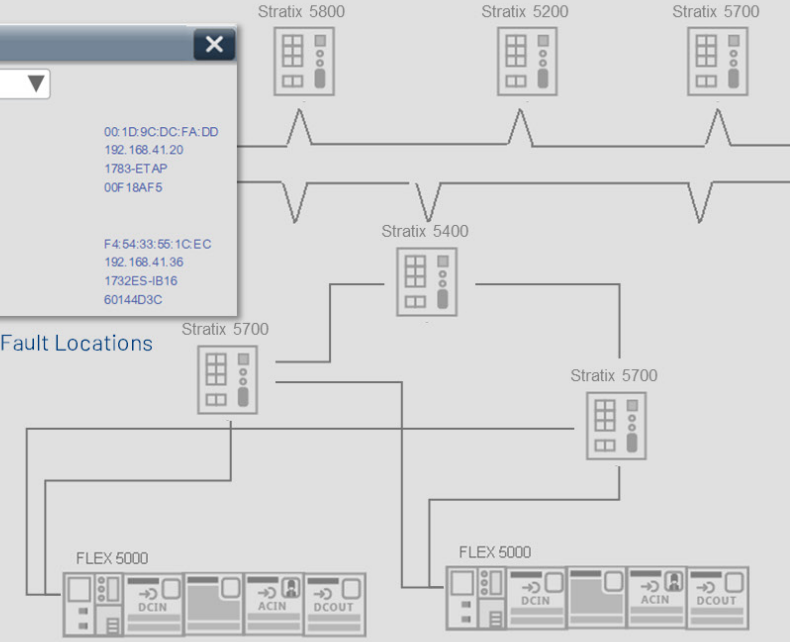


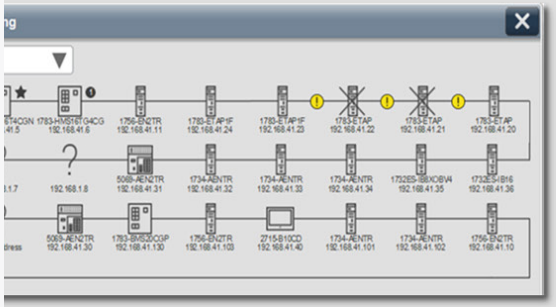

Stratix® Switches



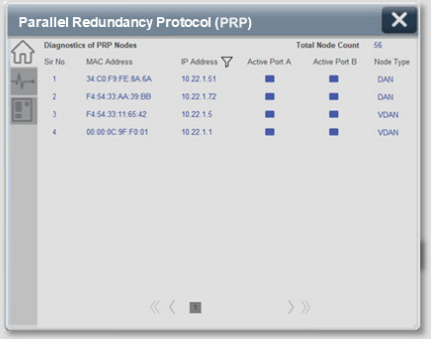

Port Diagnostics

DLR Network Fault Locations



DLR Network Layout




PRP Network Monitoring

# IO Device Library

## HMI FACEPLATES FOR COMMISSIONING AND TROUBLESHOOTING I/O MODULES

## Supported I/O Families

1756 ControlLogix® I/O

1769 Compact I/O™

1734 POINT I/O™

1794 FLEX™ I/O

1738 ArmorPOINT® I/O

1732E ArmorBlock® I/O

1719 Ex I/O

5094 FLEX 5000® I/O

5069 Compact 5000™ I/O

1715 High-Availability I/O

5015 FLEXHA 5000™ I/O

## Diagnostics

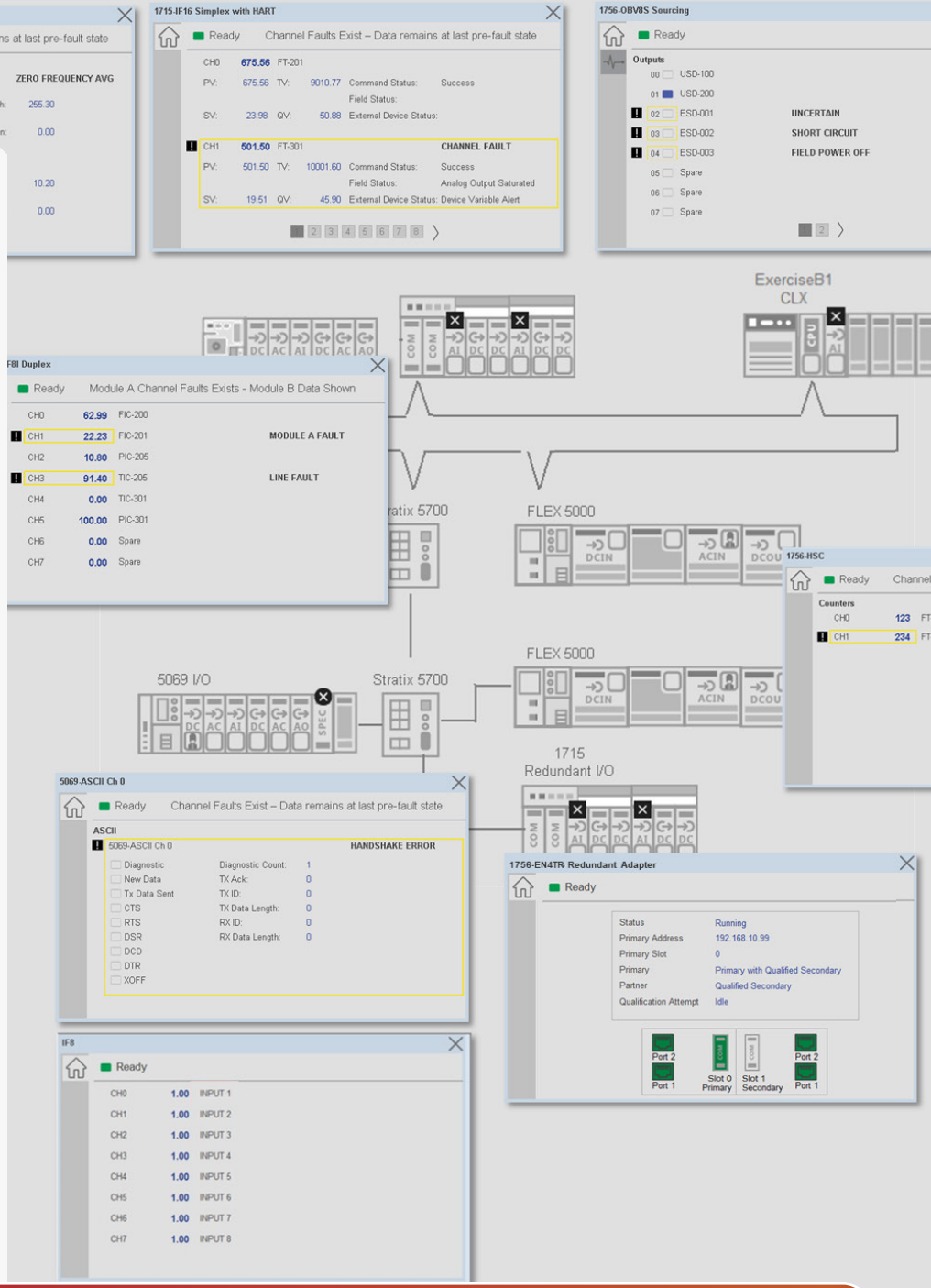
Faceplates include IO channel descriptions

View channel and module diagnostics and status

1756-EN4TR Redundant Adapter faceplate & AOI for redundant network monitoring

## Special Features:

- Use with PlantPAx and Machine Builder Libraries
- Channel/Module faults and diagnostics
- Simplify commissioning and troubleshooting
- Graphical symbols for creating system displays
- Use with **Studio 5000® Application Code Manager**
- Choose from 1000+ **HART** instruments in Application Code Manager when using 5015/5094 Analog HART modules
- No Add-on Instructions (AOI) required for I/O modules



# IO-Link Device Library

## HMI FACEPLATES AND ADD-ON INSTRUCTIONS FOR IO-LINK SENSORS AND MASTERS

## IO-Link Sensors

42AF/ 42EF/42JT Photoelectric

45CRM Color Registration Mark

45DMS Distance Measurement

45PLA Polarized Light Array Sensor

46CLR ColorSight True Color Sensor

46DFA Fiber Optic DIN Rail Amplifier

836P Pressure Sensor

837T Solid-State Temp Sensor

856T Tower Light

871FM Proximity Sensor

873P Ultrasonic Sensor

875L Capacitive Proximity Sensor

871C/871TM Inductive Sensor

1694 Elec Circuit Protection

## IO-Link Masters

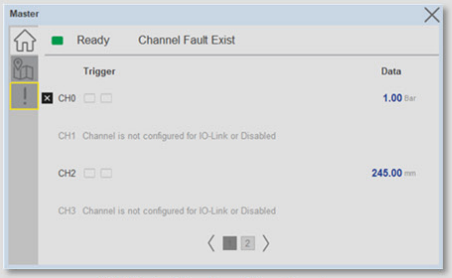
POINT I/O™ 1734-4IOL

ArmorBlock® I/O 1732E-8IOL

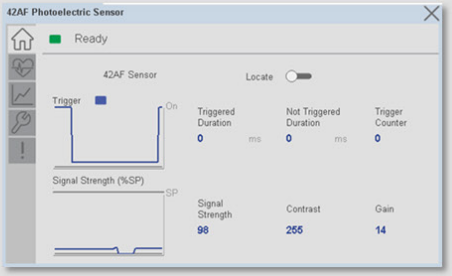
ArmorBlock 5000® I/O 5032-8IOL (Coming Soon)

## Special Features:

- Common programming interfaces
- Device parameter configuration and trigger teach using HMI
- Use with PlantPAx and Machine Builder Libraries
- Device diagnostics and status
- Simplify commissioning and troubleshooting
- Track last 4 faults with recommended corrective actions
- Use with **Studio 5000® Application Code Manager**

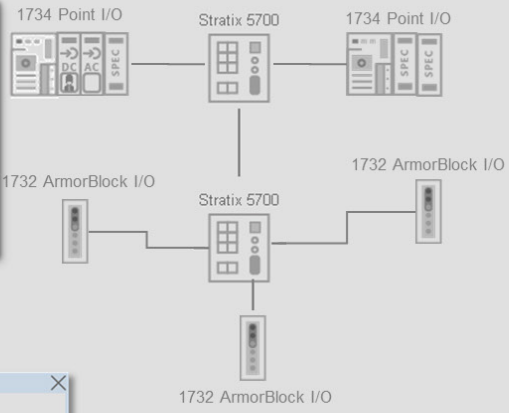


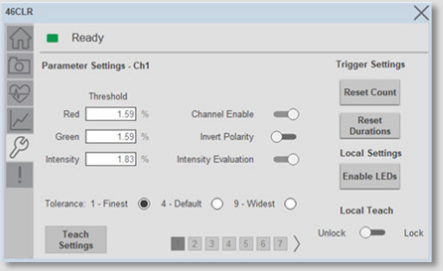

IO-Link Master Monitoring



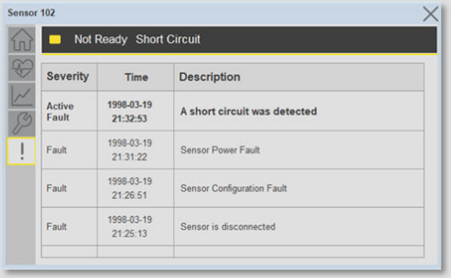

IO-Link Sensor Status and Readings

IO-Link Sensor Health

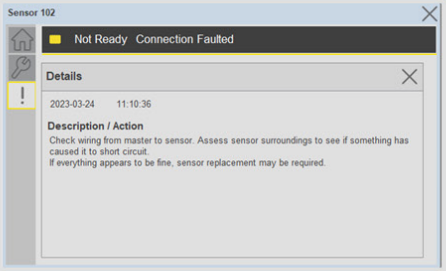



Sensor Configuration & Settings




Detailed fault history



# Safety Device Library

## HMI FACEPLATES AND ADD-ON INSTRUCTIONS FOR GUARDLOGIX SAFETY CLASS CONTROLLERS AND I/O

## Safety Instructions

DCS – Dual Channel Input Stop

DCSTL – Dual-Channel Input Stop w/ Test & Lock

DCSTM – Dual Channel Input Stop w/ Test & Mute

CROUT – Configurable Redundant Output

FSBM – 4 Sensor Bi-Dir Muting

SMAT – Safety Mat

THRSe – Two Hand Run Station Enhanced

TSAM - 2 Sensor Asymmetrical Muting

TSSM – 2 Sensor Symmetrical Muting

SFX – Safety Feedback Interface

SS1/SS2 – Safe Stop 1 & 2

STO – Safe Torque Off

## Safety Group Monitor

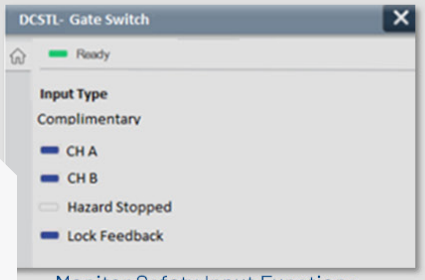
Logically group and monitor up to 32 safety functions

Monitor ID number, demand, reset required, diagnostic, fault, and mute/suspend status

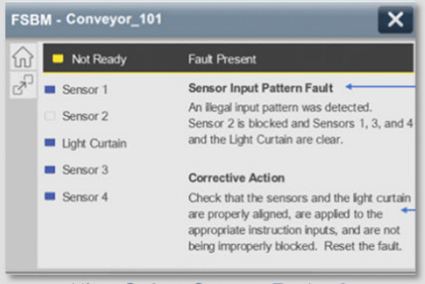
View first out demand and event log

## Special Features:

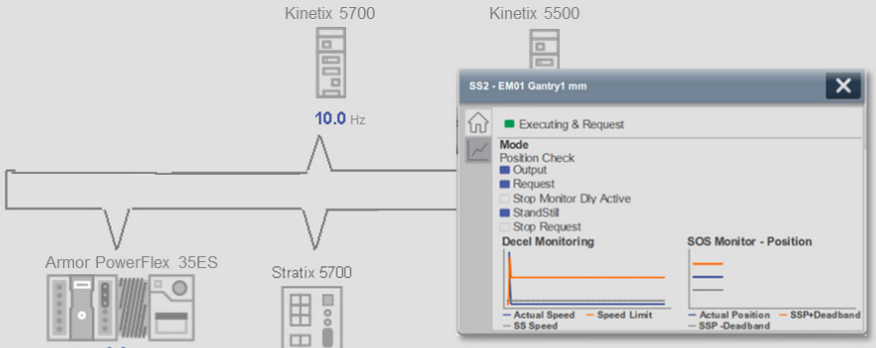
- Common programming interfaces
- Pair with Safety Class instructions for diagnostic monitoring
- Use with Machine Builder Libraries
- Simplify commissioning and troubleshooting
- Monitor safety circuit faults with recommended corrective actions
- Use with **Studio 5000® Application Code Manager**
- Use with **GuardLogix** or **Compact GuardLogix** controllers and Safety Class I/O & drives



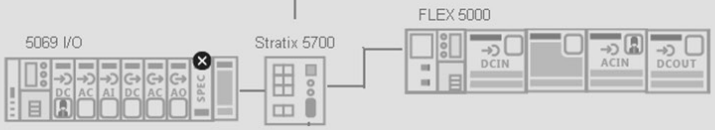

Monitor Safety Input Functions

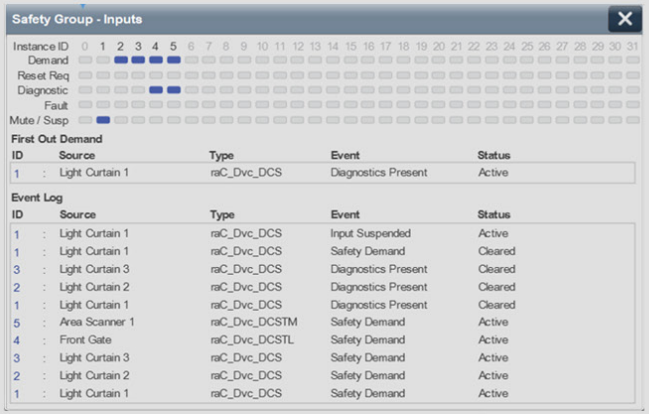



View Safety System Faults & Corrective Actions




Monitor Safe Motion Instructions




Safety Group Monitor

# Condition Monitoring Device Library

## Equipment Monitoring

Use with **Dynamix™ 1444 Condition Monitoring** modules

Easily configure and monitor rotating equipment frequency analysis for predictive maintenance

Apply to Rolling Element Bearing Pumps

Monitor:

- Overall vibration
- Bearing Issues
- Unbalance
- Misalignment/Looseness
- Flow issues and cavitation

## Diagnostics

View, configure and trend readings and limits for 4 measurement channels each with 8 bands

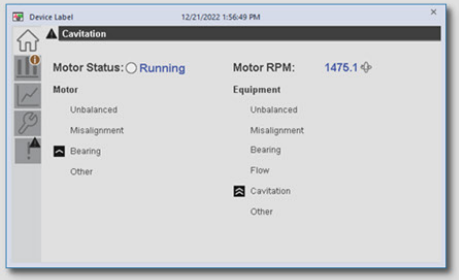
Trend all frequency bands

Monitor warning and critical warning indications for condition-based maintenance

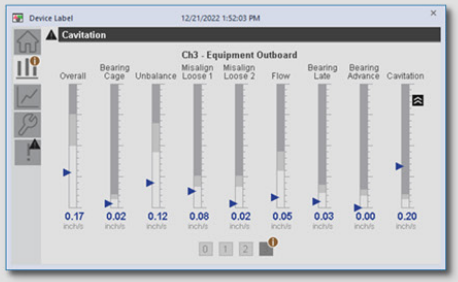
View first out demand and event log

## Special Features:

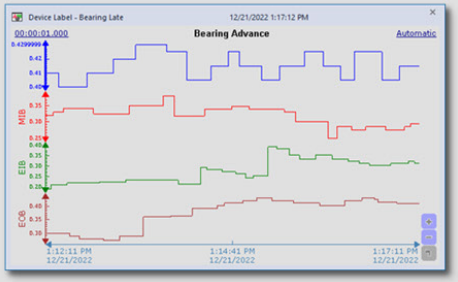
- Common programming interfaces
- Integrate with PlantPAx and Machine Builder Libraries
- Device diagnostics and predictive maintenance
- Simplify commissioning and troubleshooting
- Track last 4 vibration events with recommended corrective actions
- Graphical symbols for creating system displays
- Use with **Studio 5000® Application Code Manager** for simplified configuration with limited expertise



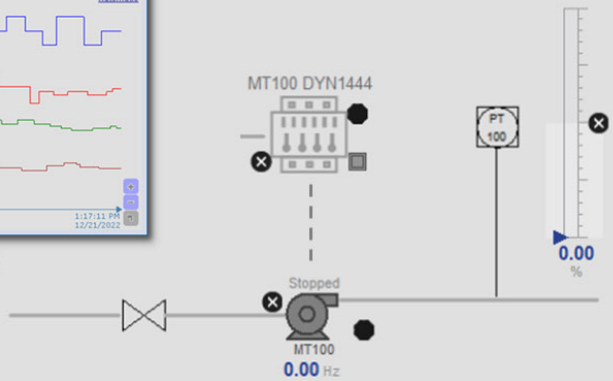

Monitor overall machine status

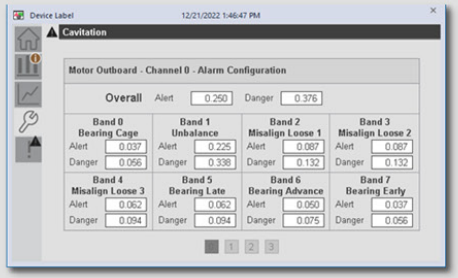



View FFT bands with Alert/Danger Warnings

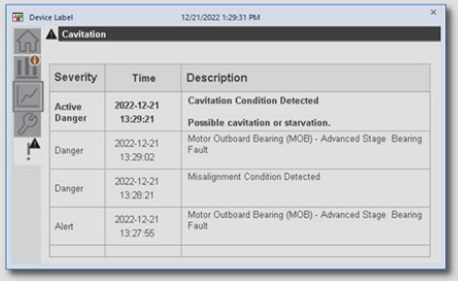



Trend 4 ch x 8 FFT b




Custom warning configuration




Detailed fault history

BACK

# Where Can I Get the Libraries?

All Device Object Libraries can be downloaded for free from Rockwell Automation's Product Compatibility and Download Center. Search "Device Object Libraries" to download the current releases.

Also see these great libraries:

- Process Library (PlantPAx)
- Machine Builder Libraries
- Mettler Toledo Device Library
- Robotics Library
- Independent Cart Technology Libraries
- Common Application Libraries

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**Power, Control and Information Solutions Headquarters**

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444
Europe/Middle East/Africa: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640
Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

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