

PlantPax 5.0 Quick Facts Sheet

Commercial Collateral: Seismic Process Solutions Channel

Competency: [RAU PlantPax 5.0 Training](#)

PROCESS CONTROLLER

What is a process controller?

- A new member of the Logix family for process control
- Provide better process capabilities when used as part of PlantPax® DCS.



Which Logix controllers have Process options?

Logix Family	Size	Process Controller
ControlLogix 5580	3 mb	1756-L81EP
	10 mb	1756-L83EP
	40 mb	1756-L8EP
CompactLogix 5380	2 mb	5069-L320ERP
	4 mb	5069-L340ERP

Are the PlantPax 5.0 library and process controller required for a PlantPax 5.0 system?

No, but with the process controller the benefits of the PlantPax 5.0 library are enabled.

Does it support redundancy?

Of course!

Has any content been removed?

No! All process controllers support motion and all other Logix features. They are our most feature rich super set controller.

Can I create a hybrid system?

Yes! The process controller can run alongside 5570, 5580, 5370, and 5380 controllers running a 4.x library.

What are the recommended IO platforms?

1756 and 5094 IO platforms.

TAKEAWAY

The process controller carries all features of the Logix family while providing additional process control capabilities designed for DCS and OEM process applications.

PlantPax LIBRARY 5.0

What is different in the PlantPax 5.0 library?

- Function blocks embedded in process controller
- String tags have been converted to custom object attributes
- Ability to configure instructions in Studio5000 with run time data visualization
- Fully encapsulated, single-click enabled process alarms

What is included in the library?

The library is available through PCDC and includes:

- Faceplates and display objects for 5.0 library objects (embedded and AOI)
- Full localization of HMI Faceplates with Unicode support (English, Chinese, French, German, Korean, Portuguese, Spanish)
- Graphical Framework for Visualization
- Complete 4.1 library package
- FactoryTalk Innovation Suite library



Can I easily modernize to the new library?

Yes! The PlantPax Migration Tool is available through PCDC and supports modernization of all previous library versions to 5.0.

How can I find more information on the instructions?

- Online help in Studio5000 for embedded instructions
- Faceplates and non-embedded AOIs documented in PROCES-RM200 (found in Literature Library)

TAKEAWAY

PlantPax Library 5.0 is embedded in the process controller, allowing easy set up of alarms, enhanced features with FactoryTalk Innovation Suite, and project standardization.

ARCHITECTURE & PERFORMANCE

How do I determine the BOM for a PlantPax system?

Easy! The Process System Estimator (PSE) is a free utility for designing a PlantPax system. Software bundles are available that align with recommended architectures for PlantPax 5.0

How can I set up a redundant architecture?

PSE can create a recommended redundant architecture. Detailed set up is documented in PROCES-UM100.

Does redundant architecture support full communication?

Yes! Redundant architecture is able to communicate information from IO to glass.

What are the architectural benefits of PlantPax 5.0 over previous versions?

- Less controllers required (up to 50%)
- Less PASS servers required (up to 50%)
- More responsive displays (~1 sec)
- Optimal power integration
- Optimize skid integration

What are the boundaries of the PlantPax 5.0 system?

PSE will maximize boundaries for a system based on constraints.

	System	Process Controller
Tags on scan	1M	50k
Alarms	100k	7.5k
IO	25k	4k
Control Strategies	—	2k
HMI Clients	120	—

TAKEAWAY

PlantPax 5.0 system has the smallest footprint of any previous PlantPax system with improved performance, memory, display callup, and data throughput.

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SECURITY

Does Rockwell Automation carry any cybersecurity certifications in PlantPax 5.0?

Yes! Multiple IEC 62443 certifications were achieved working with TÜV Rheinland.



Sub	Description	Security Level
2-4	Project Delivery Team	ML3
3-2	Risk Assessment	Certified Individuals
3-3	Reference Architecture	SL1*
4-1	Development Life Cycle	ML3
4-2	Product Certification	SL1

*expected CY 2020

How does IEC 62443 address cybersecurity?

The Zone and Conduit Model separates a control system into different zones of trust, isolating critical systems from non-critical systems. This allows design flexibility and monitoring of most critical assets.

Are there any reference architectures?

Yes! There is a 3-3 Checklist and a Network and System Configuration Guidance.

Who can use the 3-3 Architecture?

Everyone! The architectures were designed and built to be flexible enough to fit any DCS application.

TAKEAWAY

PlantPax 5.0 supports industry standards with IEC 62443 certifications.

LIFECYCLE

What is SystemID?

A unique identifier for hardware components in a PlantPax system that enables optimized lifecycle management.

What are the benefits of SystemID?

- Provides a dashboard of hardware lifecycle
- Lets you subscribe for notifications specific to your system

How easy is it to migrate to PlantPax 5.0?

- Modernization Planning Guide lays out requirements to upgrade
- PlantPax migration tool maps previous PlantPax libraries to the current library
- SMEs provide support with Lifecycle Services

How does embedding the library help with lifecycle?

- Migration to future library revisions is a simple firmware upgrade
- Makes for consistent global deployment

How can a competitive platform migrate to PlantPax 5.0?

- Knowledgeable, industry modernization experts
- Tools, IO cabling, and scanners available
- Flexibility for a phased or total migration

TAKEAWAY

PlantPax 5.0 supports modernization from legacy PlantPax systems and competitive platforms while enables a higher level of support with SystemID.

ANALYTICS

Can PlantPax 5.0 monitor health and diagnostics?

- Automatic Diagnostics provide summaries and maintenance displays for hardware faults out of the box.
- Detailed diagnostics are available with FactoryTalk Analytics for Devices.



What report and dashboard templates are available for PlantPax 5.0?

There are templates for alarms, objects, traceability, system maintenance, and more included in the standard library download. The process objects have loop diagnostics with live process data.

How do I leverage analytics with PlantPax 5.0?

- FactoryTalk Historian TWX Connector connects historical, contextualized data with FactoryTalk Innovation Suite
- ThingWorx and Vuforia applications built with the 5.0 library can utilize live data and historical data
- Pavilion 8® and PlantPax® MPC supports advanced Model Predictive Control applications

Does PlantPax 5.0 utilize ThingWorx or Vuforia?

Yes! There are faceplate based AR experiences in Vuforia along with Process Strategy Templates for use within ThingWorx.



TAKEAWAY

PlantPax 5.0 enables smart diagnostics and analytic applications out of the box.