

# PRESERVING YOUR PAST, ENABLING YOUR FUTURE

## NEXT GENERATION CONTROLLER TECHNOLOGY





Introducing the powerful EHPMX/C300PM controller: Preserve existing control strategies and HMI while delivering higher performance and enhanced capabilities. Achieve operational excellence, meet security and modernization goals, and enable process optimization to meet sustainability targets. Implement on-process for immediate improvement.

## POWERFUL SOLUTION FOR BETTER PERFORMANCE AND LONGEVITY

Honeywell's commitment to long-term support for its control systems is proven by providing customers with simple, cost-effective, and incremental modernization options. For over four decades, from the Process

Manager (PM) to our Enhanced High Performance Process Manager (EHPM), Honeywell has helped customers worldwide extend the longevity of their TPS and TDC3000 systems. Enhancing capabilities without costly rewiring

or disruption to operations, we've continued to develop our automation solutions to keep pace with industrial manufacturers' evolving demands.





## **BACK TO THE FUTURE: PRESERVING YOUR INTELLECTUAL PROPERTY FOR A NEW GENERATION**

Honeywell's innovative unified controller architecture enables customers to retain the years of knowledge and expertise captured in their control strategies and configurations. As experienced engineers retire, we help preserve plant operations intellectual property and transfer it to modern control technology for a new generation.

With the EHPMX/C300PM controller, there is no need to change any existing advanced process control (APC) and base regulatory control strategies, rebuild points or modify operator display graphics. Users can instead focus on investments with the highest return. On-process migration makes your HPM or EHPM path to EHPMX/C300PM seamless.



## **NEW CAPABILITIES: FOR A SUSTAINABLE FUTURE**

As plants pursue carbon reduction commitments and modernization goals, the Honeywell EHPMX/C300PM controller offers fast, proven solutions to increase control performance, extend I/O, support more complex control operations and enhanced security.

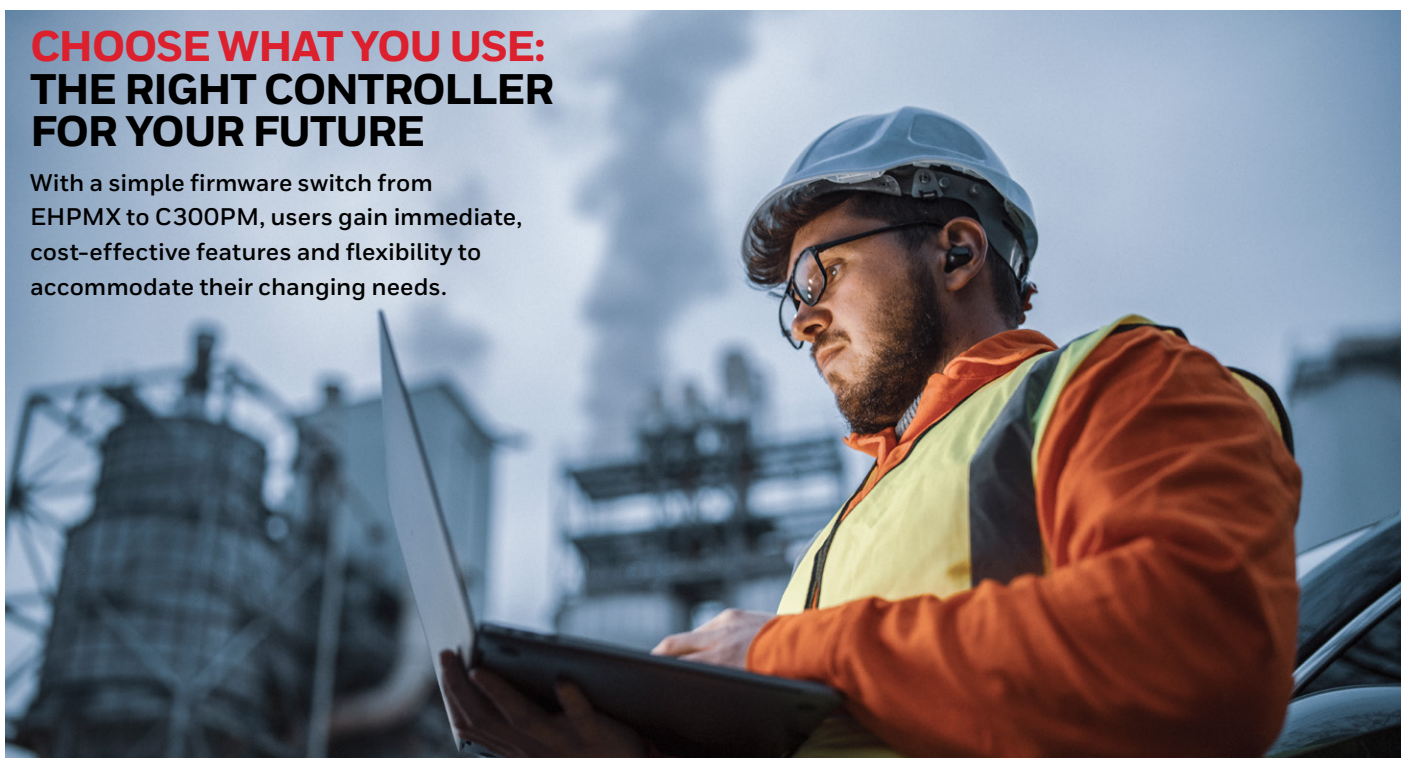
EHPMX/C300PM controllers deliver seamless HPM/EHPM replacement and integral expansion capacity. Experion's Unified Engineering Tools simplify implementation and enable growth.

With on-process migrations that retain existing wiring, conduit and cabinets, users can leverage the latest Experion and TPN software capabilities to gain immediate controller performance improvements and new capabilities.

- At least 50% greater data access performance over EHPM
- Integrated security with built-in firewall
- Simple firmware update from EHPMX to C300PM, enabling easy access to new features such as advanced batch control, sequential control, and IO HIVE

## **CHOOSE WHAT YOU USE: THE RIGHT CONTROLLER FOR YOUR FUTURE**

With a simple firmware switch from EHPMX to C300PM, users gain immediate, cost-effective features and flexibility to accommodate their changing needs.



# COST-EFFECTIVE ON-PROCESS MIGRATION

Honeywell's EHPMX offers the most efficient route to a unified modern controller platform. Building on the success of our EHPM controllers, EHPMX provides all the same features with improved performance, new capabilities, and enhanced security, to renew the life of legacy control systems, matching Experion controls.

Designed for the new generation of control engineers, EHPMX brings the latest Experion technology to the HPM and EHPM family of process controls. Preserving controls, I/Os, operator display graphics as well as Application Module controls, EHPMX delivers 50% greater data access throughput and since the control firewall is built-in, there is no need for an external Control Firewall (CF9) as there is with the EHPM.

With a unified engineering environment, the Control Builder tool is used to configure all EHPMX, C300PM, and C300 controllers. Engineers can build and configure controller points and create, edit, and compile CL programs using Visual Studio, saving engineering time and eliminating potential conflicts and errors.

## EHPMX FEATURES AND BENEFITS

- Robust peer-to-peer communications and control
- Unified engineering environment and system management
- Enables the use of a single engineering tool for controller configuration
- Provides direct HART data integration for smarter asset management
- On-process hardware upgrade /Infrastructure refresh
- Preserves customer intellectual property

## HART DATA PASS THROUGH

EHPMX also provides HART Data Pass-Through. Process and status data is automatically populated through HART I/O cards into the process controller and, finally, standard operator displays with no additional configuration required. This solution also provides a pass-through capability that enables full asset management using Honeywell's innovative Field Device Manager (FDM) application.

The HART integration solution is part of Honeywell's secure upgrade strategy, enabling customers to upgrade to the latest Experion PKS technology while retaining existing control investments. Minimally invasive method enables a host of robust HART functionalities.



# UNRIVALED CAPABILITIES WITH C300PM

Built on our most advanced controller platform, shared with C300 and UOC, you can choose the control capabilities you need. A simple on-process firmware update unlocks EHPMX's complementary C300 features, enabling the powerful C300PM dual controller.

With all the features of the EHPMX and additional capabilities, the C300PM is the ideal solution for plant owners and operators seeking to implement new controls to meet their sustainability goals, as well as those with a mixture of EHPMs and C300s that want a modern, unified controller platform.

Modernizing the HPM/EHPM controller installed base and providing a common engineering environment with Experion, the C300PM eliminates the need to replace existing Process Manager IO hardware. It enables users to protect their control strategies and HMI developed over the years while seamlessly evolving their systems with access to the most advanced Experion PKS control functions and capabilities.

**Control Execution Environment (CEE)** is Honeywell's deterministic Control Execution Environment (CEE), which executes control strategies on a constant and predictable schedule. Loaded into the C300PM controller, it provides the execution platform for a comprehensive set of automatic control, logic, data acquisition and calculation function blocks. Each function block contains pre-defined features such as alarm settings and maintenance statistics to guarantee consistent process control strategy execution.

**Advanced Batch Automation** comes as standard with the C300PM so that EHPM users no longer have to develop custom functionality to obtain the same level of performance as the C300 controller in demanding applications such as blending and batch processing. Users can take advantage of increased processing speed for their critical control loops, while peer-to-peer communications between different generations of controllers help optimize overall system performance.

**Custom Algorithm Blocks (CAB)** functionality leverages user-defined algorithms and data structures to greatly reduce the effort required for complex and efficient control strategies. Control strategies created in CAB work like other function blocks in Experion controllers. CAB function blocks can be instantiated as required to save time and effort in replicating and expanding processes.

**Experion I/O HIVE Network** incorporated into the C300PM provides a fault tolerant, high-speed field network. HIVE (Highly Integrated Virtual Environment) allows the controller to communicate directly with distributed Universal I/O (UIO) and Series C I/O so that these can be easily added. The C300PM also optionally supports many leading industrial communication protocols, including Peer Control Data Interface (PCDI), Profinet, EtherNet/IP, OneWireless™, FOUNDATION Fieldbus and Profibus.

## C300PM FEATURES AND BENEFITS

- All of the features of the EHPMX controller
- Multi-generational coexistence of process controllers
- Same Data Access throughput improvements as EHPMX
- Robust peer-to-peer communications and control
- Unified engineering environment and system management
- On-process hardware upgrade /infrastructure refresh
- Builds on the foundation of existing intellectual property
- Enables the use of a single engineering tool for controller configuration
- Provides direct HART data integration for smarter asset management.





## PROVEN AND FAMILIAR UPGRADE

Honeywell provides on-process migrations to unlock valuable new capabilities without unnecessary downtime and production outages. We deliver all the tools and services needed to address cost, risk, and resource challenges.

With Honeywell's assistance, HPM/EHPM users can take advantage of a familiar migration technique to the powerful EHPMX/C300PM controller,

preserving control strategies and HMI developed over the years of operational and process changes. By avoiding costly rip-and-replace changes such as rewiring I/O, redeveloping control strategies, creating all new system graphics, and retraining all operators, customers extend the Honeywell control system's life, match native Experion capability from the TPS infrastructure, and achieve lowest total cost of ownership. HPM/EHPM

to EHPMX/C300PM controller replacements can be completed without the need for a plant or unit shutdown.

Plants that have not installed the EHPM can go directly from the HPM to the advanced features of the EHPMX/C300PM controller as part of a simple on-process migration.

We also have kits available for off-process migration of even older generation PM and APM controllers.



## WHY HONEYWELL?

Working for maximum value and the lowest total cost of ownership, Honeywell's modernization solutions keep your control systems robust and extend their lifecycle indefinitely. We're continually innovating to support improved performance and new functionality without the disruption of a full hardware replacement.

From early automation solutions to Industry 4.0 and autonomous operations, we've offered the solutions, services, and expertise to support customers across the Lifecycle, helping boost operations and efficiency, enhance safety and security, and improve maintenance and reliability. At the forefront of fresh thinking and with you for the long haul, Honeywell is the partner your processes need.



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FUTURE  
IS  
WHAT  
WE  
MAKE IT**

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