Experion PPC (Panel PC)
Product Information Note

Experion PPC (Panel PC) is an industrial grade touch panel PC that extends the proven Experion user experience to local field operations with controllers. This robust, easy to maintain hardware is built on open industry standards and provides connectivity to various controllers in a flexible, secure and integrated environment which helps reducing the engineering and maintenance costs.

The Experion Panel PC is ideal for field operations at machine and/or process levels and offers comprehensive data integration capabilities and consistent operator experience across the plant, therefore eliminating the need to learn different sub-systems in a multi-vendor controller environment and improving operator effectiveness.

Combined with other Experion components and software, Experion PPC meets your local operation needs regardless of your industry, process or machine size and complexity. It allows you break free from proprietary embedded Panel HMIs and reduces maintenance overheads and complex data integration while improving process data flow in your plant.

The simple, easy to use Experion PPC HMI and tools enable quick startup, uniform data-exchange with controllers, effective operations, and change management.

Depending on the system availability needs, the Experion PPC can perform as a remote Experion HS station, as an Experion HS Panel server with station or as a remote thin client connecting to the engineering station. These flexible operation modes help meet different architecture needs, greatly improves startup and commissioning time and reduces data integration costs.

Experion PPC– Proven Experion HMI at your fingertips!

- Robust hardware for improved availability and performance
- Maintenance free design based on Open industry standards for improved lifecycle and interoperability
- Specifically packaged Experion components with touch functionality for higher reliability
- One-stop solution for local operation covering wide variety of controllers

FEATURES & BENEFITS

- Temperature range 0 to 55ºC (32 to 131ºF), 1Grms Operating vibration– Reliable hardware for maximum performance
- 28W typical operating power– Higher utility savings
- Fan-less design, uses Solid State Drive (SSD)– Maintenance friendly

- 18.5inch display with widescreen 1920x1080 resolution– Optimum display size with Best in class readability
- Intel core processor, 8GB RAM, Windows 10 Enterprise OS– Better interoperability and protected investment
- Simple software licensing– Easy to order

- Scalable from 550 to 16K composite SCADA points
- Utilizes high-performance and stable Experion HMI platform– increased productivity and standardization across plant
- OPC UA based lean, simple and secure interface with ControlEdge PLC

- Support for Modbus, DNP3, IEC 60870, IEC 61850 and more interfaces– one stop solution for all Honeywell and third party SCADA controllers, reduced maintenance
- Comply to ISA99 Level 2 security model, built-in Experion user based security– reduces cyber security risks

- Flexible operation modes– better operator efficiency, reduces data integration cost
- Common engineering and HMI tools– Lower Training, maintenance overheads, improved Total cost of ownership
- Connect to multiple PLCs/RTUs, with high trending, alarm & display capacity– Standardize

Robust Hardware based on latest technology

The Experion Panel PC uses robust and maintenance-free hardware components for maximum availability and performance. The higher temperature, vibration and shock resistance limits helps Experion PPC to operate in harsh environmental conditions.

Experion Panel PC is certified for use in industrial automation environments. It supports all key safety and environmental regional certifications to facilitate safer and compliant operations.

Bringing together rugged hardware and the latest, open computing technology, Experion Panel PC provides improved lifecycle and support, and better investment protection and interoperability with plant sub-systems. It is built around a high performance Intel processor and comes pre-installed with Windows 10 operating system.

Proven Experion HMI with Touch

Experion PPC offers proven and reliable Experion HMI with touch functionality derived from the Experion Orion Console. The intuitively built HMI design is optimized to the needs of local machine and process level operations.

Being a true extension of Experion SCADA, Experion PPC offers a complete suite of standard HMI displays for IO points, groups, equipment, controllers, alarms, trends, and events displays for intuitive operations. Common engineering and configuration tools enable operators to locally configure or change parameters of Honeywell and third party controllers quickly.

Flexible Operation Modes

Depending on architecture and availability goals, Experion PPCs can be used in any mix of 'Remote HS Station' and 'HS Panel Server with Station' operation modes. This is achieved by selecting the desired Experion software personality. It allows greater flexibility and standardization across the plant, therefore reduces the overheads of maintaining a Panel HMI mix.

Robust hardware with proven Experion HMI with Touch

Seamless Integration with Universal Data Exchange

The Experion SCADA engine uses various polling techniques depending on communication protocols supported by respective controllers. Multiple SCADA interfaces are natively supported in Experion including Modbus (TCP/Serial), Universal Modbus, OPC UA (*only for ControlEdge PLC currently*), DNP3, IEC 60870, IEC 61850 (for smart IEDs/Relays) and more.

The polled IO points from these various controllers are treated uniformly in structured points by the Experion SCADA engine for display, alarming, events historization and reporting. This is irrespective of the controller make, type or the communication protocols being used while polling, which makes Experion Panel PC a perfect choice for multi-vendor sub-systems.

Fast, Lean and Secure Integration with ControlEdge PLC

Experion PPC takes the controller integration paradigm to the next level with Honeywell's new ControlEdge PLC Integration over OPC UA interface. This integration is fast and lean as the PLC configuration tool can be directly launched from Experion PPC engineering environment and the engineered PLC variables are automatically configured in the Experion point database. Using name based access to the OPC UA address space improves configuration efficiency and simplifies PLC data integration into Experion.

- Energy savings by lower operating power, heat dissipation
- Better readability using true widescreen Panel resolution
- Easy to order, Scalable solution for up to 16K composite SCADA points
- Best-in-class Integration with Honeywell's ControlEdge PLC
- Built-in Security for protection against Cyber Security risks
- Rich function libraries, HMI Web Solution pack for rapid custom display configuration
- Supports wide range of SCADA interfaces enabling standardized data exchange with various controllers
- Operate as Remote HS station or HS Panel Server with Station based on your architecture needs

- User Defined Scanned Parameter feature allows mapping of complex PLC data structures into a single SCADA point
- ASM complaint graphics and advanced alarm management features for improved operator effectiveness
- Lower training and maintenance cost by supporting common Experion HMI and tools for local operations
- Connect to multiple PLCs/RTUs without needing any additional software license
- No practical limit on number of graphic displays per Panel PC

The built-in firewall and secure boot features of the ControlEdge PLC and ISA99 compliant secure communication model between ControlEdge PLC and Experion PPC significantly reduces cyber security risks.

Best in class integration with Honeywell's ControlEdge PLC

A combination of ControlEdge PLC, Experion PPC and central Experion DCS or SCADA system provides

- A consistent plant-wide data flow and exchange for improved operator emergency response and workflow
- Common HMI tools extended to Experion PPC for lower training and maintenance overheads and therefore improved TCO
- Improved lifecycle support by providing ease of system maintenance and change management

Easy to order & highly scalable solution

Experion PPC ordering is very simple with 18.5 inch Panel PC hardware, with pre-installed Windows 10 operating system and drivers, available as a single package from Honeywell. Likewise the Experion Panel software is simplified, depending primarily on the desired operating mode. For *Remote Station* to an Experion HS system only the conventional Experion station license is required. For HS Panel *Server with Station* mode there is a simple set of Experion Panel licensed options, with all key controller interfaces and data exchange options included in the base software.

The Experion PPC solution is highly scalable and allows you to expand as your system grows. You can start from a 550 points system and add up to a maximum of 16K points per Experion PPC. Adding further value with features like OPC, Data publish, history backfill and many more is very easy.

Adding more Experion PPC to other plant allows you to reuse project work and improves expansion uptime.

Built-in Security

Experion PPC provides built-in security covering Experion user based security with configurable access and security levels for operators, supervisors and other personnel. For secure electronic record keeping for Pharma/Batch industry, Experion PPC has built-in security mechanisms like electronic signature for every change, time-out period and signature requirements for revert functions, change authorization and more.

Technical Specifications

PARAMETER	SPECIFICATION
OPERATING SYSTEM	Microsoft Windows 10 Enterprise 2016 LTSB (Pre-installed)
SOFTWARE OPTIONS	Separately ordered based on following operation modes • Experion HS Panel Station **OR** • Experion HS Panel Server with Station (Base 550 points, up to 16K points), Regular and Runtime options
PROCESSOR	Intel Core i5-4300U, 1.9GHz
MEMORY	8 GB DDR3
ONBAORD STORAGE	256 GB, Solid State Drive (SSD)
ETHERNET	Integrated 2x 10/100/1000 Mbps ports
USB	2x USB 3.0
RATED INPUT VOLTAGE	24VDC, +/- 20%
TOUCH SCREEN	Projected capacitive (PCAP) multi touch
INGRESS PROTECTION	Front panel: IP66
OPERATING TEMPERATURE	0º to 55º C (32º to 131º F)
CERTIFICATION	
EUROPE	CE (LVD), CE (EMC), RoHS
USA / CANADA	UL, cULus, FCC Class A level
OTHERS	BSMI, KC, RCM, CCC

For More Information

Learn more about how Honeywell's Experion PPC can improve your operations, visit honeywellprocess.com > Experion Panel PC or contact your Honeywell Account Manager, Distributor or System Integrator.

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