industry: general industries
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WATLOW®
Powered by Possibility

For the Best User Experience, the Interface is Everything:
Introducing PM PLUS™

Summary:

While older controllers offer solid performance and control, Watlow's new PM PLUS™ 1/16 DIN temperature control offers that **in addition to** an improved user experience, easier configuration and an overall more rugged solution.

Soon, Watlow's EZ-ZONE® PM6 panel mount controllers will be replaced with the PM PLUS 1/16 DIN controller, offering users a simpler, more intuitive, more rugged controller solution that can be easily swapped with their existing controllers. Like the original EZ-ZONE PM, the PM PLUS can be ordered as a PID controller, or an integrated controller with multiple functions combined into one.

According to the best available research, improvements in the user interface in a piece of technology can yield improved efficiency of **up to 700%**, factoring in ease of use, ease of training and reduction in errors committed[1]. Modern controllers such as PM PLUS are designed with this in mind, and can provide a distinct competitive advantage when deployed into both new and existing processes.
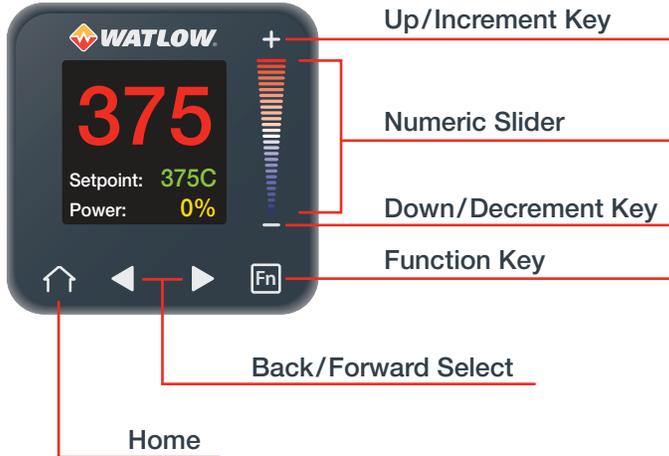
[1] See Randolph G. Bias and Deborah J. Mayhew (2005): Cost-Justifying Usability: An Update for the Internet Age. Elsevier.

These new design features include:

A More Intuitive Interface

The first and most noticeable feature of the PM PLUS is its more modern display screen, with elements users will be familiar with from today's smartphones. These include a full-color display with full characters and solid state touch keys (SMOOTH-TOUCH™ keypad).

Controller Interface

Up/Increment Key

Numeric Slider

Down/Decrement Key

Function Key

Back/Forward Select

Home

Using the PM PLUS:

- Scroll up or down lists using the "+" or "−" keys.
- Increase or decrease numeric parameters with the slider.

- Select items or move to lists using the "Forward" arrow.

- Return to the previous selection with the "Back" arrow.

- Return to the home screen from any other screen using the "Home" button.

These features make for a much more intuitive interface. No longer do users have to memorize key presses and error codes; full text menus can be displayed easily and navigation through the menus is more obvious. The result is a controller with less complexity, requiring less training and reducing downtime. When there is a problem or a change is called for, there is less need to refer to arcane manuals to perform required functions. (And when a manual is called for, improved documentation will help the operator find the needed information more quickly.)

The dynamic display is also multi-language capable, making it even more user-friendly for global organizations with multinational locations.

Efficient and Simple Configuration

The PM PLUS is designed to be completely backward-compatible with any systems currently using an EZ-ZONE PM controller, with minimal configuration needed. It has the same DIN size, wiring and firmware functions, and is just as solid in its performance. Even better, the reduced menu structure uses a "list of lists" approach, which further simplifies the process of choosing needed options so operations can get up-and-running faster.

For even more efficient configuration, parameter sets can be downloaded from the controller via Bluetooth® to the EZ-LINK™ mobile app. The same data can then be transferred to other controllers easily, reducing the need for additional cabling and computer setup.

More Location Options

With most controllers on the market, there is a limit to where the controller can be placed and still be easily accessed by users. Those limitations are practically gone with the PM PLUS; the mobile app and Bluetooth® connectivity allow users to operate the controller at a distance, which means designers can locate the controller in otherwise hard-to-reach places.

Such access-at-a-distance within Bluetooth® range creates a boost in safety, too, as users can transfer settings and operate the controller without having to be physically present in front of it. While users can access the controller this way, security settings in the PM PLUS still provide robust security protocols that preclude unauthorized access.

A Rugged Housing that Prevents Ingress

Contamination of a controller is a real problem for many locations and applications. Older controllers often contain "contamination points," or areas where debris can become trapped and, eventually, affect performance or create human health concerns.

The PM PLUS has a modern interface (no tactile keys) with an improved seal allowing an IP67 immersion rating. Not only is this a better seal than most existing control panels, it also can better withstand a IP66 spraydown, allowing for better and more frequent cleaning of the entire apparatus reducing the risk of damaging the controller.

Because the PM PLUS uses Bluetooth® connectivity, there is no connection point on the front of the panel either, eliminating one more point of material ingress.

The lack of tactile keys and jacks with dongles also means fewer mechanical components to wear out, making for a more rugged control panel.

Is It Time to Upgrade?

Watlow is proud of the rock-solid control that our older EZ-ZONE PM6 provided our customers, and the PM PLUS marries that reliability and control with a more modern user interface. We highly recommend that customers using the EZ-ZONE PM6 consider upgrading sooner rather than later, as the EZ-ZONE will reach the end of its support cycle with the roll-out of PM PLUS 1/16 DIN control.

For purchase information and specs, visit the PM PLUS page at:
https://www.watlow.com/en/products/controllers/temperature-and-process-controllers/pm-plus

For more information contact Watlow at **www.watlow.com**

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