

Cut Time, Costs and Complexity With the Integrated Capabilities of an F4T® Controller

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Many of today's complex industrial heating systems have several devices to ensure continuous operations and efficient performance. The application may include timers and counters, limit controllers, solid state relays, data loggers, panel switches and lights, PID controllers and more. Each item takes time and money to implement and monitor, and each additional component means the potential for an additional vendor.

Watlow's F4T® temperature and process controller

(<https://www.watlow.com/products/controllers/temperature-and-process-controllers/f4t-integrated-controller>) can eliminate much of the complexity and cost by combining many of these devices into a single, user-friendly controller. Launched in 2015, the F4T was a revolutionary device then, and it continues to be a leading option today based on its capabilities and functionality.

Combine multiple devices into one

Our goal at Watlow® is to evaluate the current design of a system or what the customer wants to achieve and recommend a solution that meets or exceeds expectations. The F4T temperature and process controller often provides a fully integrated solution, which means fewer devices to manage and fewer vendors to coordinate. This saves you both time and money.

The F4T is an all-in-one solution that can include a data logger, trend chart and profile engine, which work alongside the Proportional-Integral-Derivative (PID) control loops. The addition of function blocks into the F4T allows this device to transition from a temperature controller to a process controller with ease. These function blocks include math, Boolean logic, timers, counters and several others.

There is also a large variety of input/output hardware to increase the effectiveness of the F4T as a process controller. That alone makes the F4T a cost-effective long-term option, but it has many other advantages as well.

Save time and money

The F4T saves you time, and your time is worth money. Purchasing individual devices for a system may be less expensive on the front end, however, multiple devices lead to more time coordinating with multiple vendors.

With the scalability and flexibility of the F4T, you save time and money by reducing downtime when it is time to upgrade. Working with multiple vendors can cause some confusion in the system. With the F4T, you will have one device with superior alert notifications and a single point of reference with the experts at Watlow.

The controller itself includes time-saving features too. Consider a new system being built with 100 panels. Instead of manually setting up each panel, the F4T allows the user to perform a single setup, export it from the device to a USB drive and import it to the remaining panels. The F4T turns a time-consuming process into a fast, easy setup that takes minutes.

Other benefits of the F4T

So, why is the F4T temperature and process controller better, and what can it do for you? Here are some of the F4T's top features, which contribute to and reinforce its overall benefits of reducing time, costs and complexity.

Scalability

Traditionally, when selecting a controller, the purchaser must select the number of loops needed on the device for the application. You get the number of loops you have paid for, and if you need more, a separate device will be required. The F4T, on the other hand, is pay-as-you-go scalable. Purchase what you need today, and upgrade in the field as needed.

Field upgradable

The F4T hardware and firmware can be upgraded or added to in the field. There is no need to return the device to the factory to add new features. They are installed via firmware updates and acquired through a code delivered to the customer like a satellite radio installation process, getting your operations up to speed faster than ever.

Intuitive user interface

The F4T's graphical user interface is displayed on a 4.3-inch, high-resolution color touch panel. Developed with the concept of smartphone icons for each application, the controller includes easy-to-use, touch-screen technology that shortens the learning curve of the device, reduces operator errors and can be accessed with a USB wired or wireless mouse in dirty environments or with gloves. The F4T is designed to help each user quickly and easily accomplish the task at hand.

Pre-populated, pre-configured controller

The F4T comes fully programmed with modules and software to make it easy to integrate into your system. In the past, individual modules were purchased and installed by the user before Ethernet cables were connected to the F4T by the user. Then the device needed to be programmed. Today, the device is delivered pre-populated and with limited pre-configurations to your specifications. With the F4T, the system can be up and running quickly and efficiently.

Ability to reassign modules

The F4T is a customizable solution. A temperature control device likely has an input to read the temperature and an output to tell another device when to switch. Traditionally, this pre-assigned functionality could not be changed. With the F4T, the user can reassign the output to, for example, only Output 2.

Email and text alerts

Good communication and messaging alerts can mean the difference between an optimized system and one that is under or over-performing. With email and text alerts, the F4T will notify key personnel of abnormalities in critical processes. If a system has a process that automatically occurs during off-hours or a time when there is not an operator to manage it, the F4T will send an alert to your phone to advise there is an issue that needs attention.

Image capture

A unique feature of the F4T is its ability to capture images and screenshots of the controller to a USB device. To further improve the device's usability, many customers utilize this feature to create in-house manuals with screenshots to walk through potential problems with a process.

Watlow can tell you if an F4T is right for your system

Watlow's F4T temperature and process controller is a revolutionary device that continues to deliver superior functionality to customers across a variety of industrial applications. With a variety of benefits – including field upgradability, scalability, intuitive user interface, a library of hardware options that come pre-populated and pre-configured, flexibility to reassign modules and text and email alerts – the F4T is designed to save you time and money. Contact a Watlow specialist (<https://www.watlow.com/contact-us>) today to see how the F4T can improve your system.



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