

# COMPOSER® PC SOFTWARE

## Frequently Asked Questions

### What is the COMPOSER® software package?

- COMPOSER® with INTUITION® is Watlow's new software for configuring controllers. It is used to configure the F4T for your choice of flex modules, to set up functions such as control loops, profiles and alarms and link them to the inputs and outputs you want them to use and to create and edit profiles.

### Who should use COMPOSER?

- Anyone setting up an F4T for an application for the first time uses COMPOSER's pluggable modules view to set which flex modules are used and COMPOSER's function block diagram view to configure how the F4T uses the flex modules' I/O with control loops, profiles and other controller functions.
- Engineers and technicians analyzing performance or troubleshooting a system use COMPOSER's function block diagram to read input values, trace the flow of signals through the application and see outputs being set by the controller.
- Users who write and edit profiles find COMPOSER's profile view simplifies these tasks and makes it possible to add profiles to a controller without getting in the way of operators. The profile view also makes it easy to back up profiles on a computer and copy them from one controller to another.
- Using the security configuration view, OEM engineers and lab managers can limit users' access to the controller's configuration and set up password protection that applies to both the controller's user interface and COMPOSER software.
- Technicians use COMPOSER's calibration view to ensure the controller's analog inputs and outputs are properly calibrated.

### What does "Import a System Image" mean?

- A system image file contains all the configuration information for a controller including the pluggable module configuration, function block diagram configuration, parameter settings, security settings, global settings, home screen personalization and so on.
- COMPOSER creates a system image file by saving the configuration of a controller in a file on the computer.
- When COMPOSER imports a system image, it configures the controller to match what was saved in the image file.

### What do the security settings do?

- When you enable security, choose access levels and set passwords on the security configuration screen. These settings limit users' access to controller features via both the controller's user interface and COMPOSER.
- Different levels of access can be set for four user groups, including the access a user has without logging in and three groups that require passwords.
- For each feature users can be granted full access, read-only access or no access.
- Security settings are stored in the controller, not in COMPOSER, so the restrictions apply even when using the controller without COMPOSER or when using COMPOSER on a different computer.

### What is COMPOSER's pluggable modules view used for?

- Use the pluggable modules view to manage which flex module the controller expects in each slot.
- The view displays the flex modules detected by the controller and indicates which flex modules the controller has been configured to expect. It also indicates any missing or miss-matched modules.
- The pluggable modules view displays a description of each flex module to help you understand the capabilities the module provides to the controller.
- When the controller is set to expect a six digital input/output module, an option on the pluggable modules view allows you to choose the voltage supplied for switched DC outputs.

## Why can't I enter my flex module part number in the pluggable module view?

- A few modules can only be used in specific slots. The dual 10 amp SSR flex module (part number FMHA-KAAA-Axxx) takes up two slots; so it does not fit in slot three or slot six, and the slot to the right must be left empty. The Modbus® RTU 232/485 module (part number FMCA-2AAA-Axxx) only works in slot six.
- The pluggable modules view rejects part numbers that it does not recognize. Double-check the part number and try again. Also check for an update to COMPOSER that might include support for new flex modules.

## What is the function block diagram view used for?

- The function block diagram graphically depicts how the controller is configured for an application.
- There is a function block on the diagram (or canvas) for each of the controller's inputs and outputs.
- Initially function blocks for controller features such as control loops, cascade loops and alarms are in the library. These blocks and others including math, logic and variable blocks are used to add application-specific functionality to the controller.
- To configure the controller for a specific application, drag function blocks from the library to the canvas and connect them to each other and to input and output blocks as needed. For example, to control a heater according to the temperature measured by a sensor, drag a control loop from the library and connect it to the blocks for the sensor input and the output that drives the heater.

## How do I see more of the function block diagram at one time?

- The navigator window has a scale control; drag the slider to the left to zoom out and see more of the function block diagram.
- The navigator indicates the current view of the canvas with a black rectangle; drag the rectangle in the navigator window to adjust the view.
- Maximizing the COMPOSER window or using a larger and higher resolution computer monitor will allow you to see more of the canvas without zooming out.
- Unpinning the library, parameters, help and navigator windows collapses them to the right of the COMPOSER window which increases the space for viewing the function block diagram.

## How can I make the help, library, parameter or navigator window in the function block diagram view bigger?

- Drag the border of the window to the size you want.
- Drag one or more of these windows out of the COMPOSER window and set it to any size you want. This is especially useful if your computer is set up with a desktop extended over more than one monitor.

## How do I set a parameter such as set point with COMPOSER?

- Parameters that users need to access are available on the controller's user interface, but when developing an application or troubleshooting one, it is convenient to view and set parameters that relate to the setup or operation of the controller in the function block diagram. You can view and set the parameters used to configure a function block by double-clicking the block in the function block diagram. For example, to set the set point of a control loop, double-click the control loop block in the diagram and then in the parameters window find and edit the set point.

## How do I view a value such as a temperature with COMPOSER's function block diagram?

- A connection that moves information between function blocks, such as a temperature measured by an analog input block and used as feedback by a control loop block, is shown as an arrow connecting the block that is the source of the information to the block that uses it. These arrows are referred to as signals. To view the value of signal, hover the mouse pointer over the signal line or right-click the signal and choose Show/Hide Data. With that option set, the signal's value or error status is shown at each end of the signal where it connects to function blocks.

## Can I start working on an application with COMPOSER before I have all the controller hardware?

- As long as you have a controller with the features you need, you can start configuring it before you install any flex modules. You can set the controller to expect the flex modules you plan to use by entering their part numbers in the pluggable module view. The inputs and outputs from the expected modules appear in the function block diagram and can be connected to loops, alarms and other controller functions just as if they were present in the controller. However, the controller will not turn on any outputs until all the expected flex modules are detected by the controller.

## How can I personalize what is displayed on the F4T's user interface?

- On the device details view set the device name parameter. This is displayed at the top left of the controller's user interface.
- Use the function block diagram to set the name parameters for function blocks such as control loops, analog inputs and outputs. These names are used both in COMPOSER and the controller's user interface. For example, the name you set for a control loop is the name that shows up in the controller's home page when that loop is displayed and in COMPOSER's profile view when the loop is used in a profile.
- Use COMPOSER's personalization view to set up the controller's home pages.

## How do I download a profile I created with COMPOSER?

- COMPOSER's profile view shows you the profiles that are in the controller. When you create a new profile with COMPOSER's profile view, it is created in the controller as you work. When you add or edit a step in COMPOSER, the changes are being made in the controller.
- In COMPOSER's profile view you can export a profile from a controller to a computer file and later import that profile in to another controller, or restore it to the original controller in the event it was changed or deleted.

## What is a profile password?

- You can password protect a profile if you want to prevent someone else from changing it.
- Users can view a password protected profile without knowing the password. The purpose of profile password protection is to give you confidence that the profile was not altered; not to keep the profile contents secret.
- Users can duplicate a password protected profile without knowing the password. The duplicate profile is not password protected and can be modified, so other users do not have to recreate protected profiles to make variations of them.
- When you export a password protected profile from the controller to a file on the computer, the password protection is included with the profile. When the profile is imported into a controller, it is still protected by the same password.

## Does COMPOSER run on Windows® XP?

- COMPOSER installs on Windows® 7 and Windows® 8. COMPOSER does not install on Windows® XP. Because Microsoft® has ended long-term support for Windows® XP, there is no longer a resource for resolving technical issues. Furthermore, supporting Windows® XP would limit COMPOSER's feature growth by excluding the use of pending and future extensions to the .NET Framework, Microsoft®'s extensive library of functions upon which COMPOSER is based, because these extensions will not be supported by Windows® XP.