

# Facility Explorer Programmable Controller Tool (FX-PCT) Catalog Page

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Refer to the [QuickLIT website](#) for the most up-to-date version of this document.

The Facility Explorer Programmable Controller Tool (FX-PCT) is used to configure, simulate, and commission the Facility Explorer Programmable Controllers (FX-PCAs, FX-PCGs, FX-PCVs, and FX-PCXs).

FX-PCT operates in three modes that provide key functionality for your system: Configuration, Simulation, and Commissioning.

The **Configuration** mode allows you to select a wide variety of mechanical and control logic options through system selection trees for typical air handling, terminal unit, central plant, and VAV box mechanical systems. When required, you can customize the standard logic provided by the system selection process to meet your specialized control logic requirements. To use the FX-PCT Help to assist you as you make selections in the System Selection Tree, press F1.

The **Simulation** mode allows you to review the application logic as if you were commissioning the system. You can make adjustments to setpoints, inputs, or sensors during a simulation session to validate the logic before assigning the configuration to a specific controller.

The **Commissioning** mode manages the downloading of files to the controllers through two different network connection points. You can connect using a Wireless Commissioning Converter (FX-BTCVT-1) or BACnet® router (TL-BRTRP-0) between your laptop and the MS/TP bus, or using a USB adapter with ZigBee™ driver for your laptop computer

After downloading the controllers, you can use the Commissioning mode to validate the sensor and control point interfaces, and adjust key setpoints and setup parameters.

For VAV applications, FX-PCT includes an optional box flow test to automatically exercise all the VAV boxes to ensure correct mechanical installation and proper configuration of the key flow setup parameters. In addition, the Commissioning mode has a Balancer tab for VAV applications that guides you through the typical steps of setting the flow constants.

The FX-ZFR Checkout Tool (FX-ZCT) is available to validate the wireless connectivity and health of your wireless mesh network.

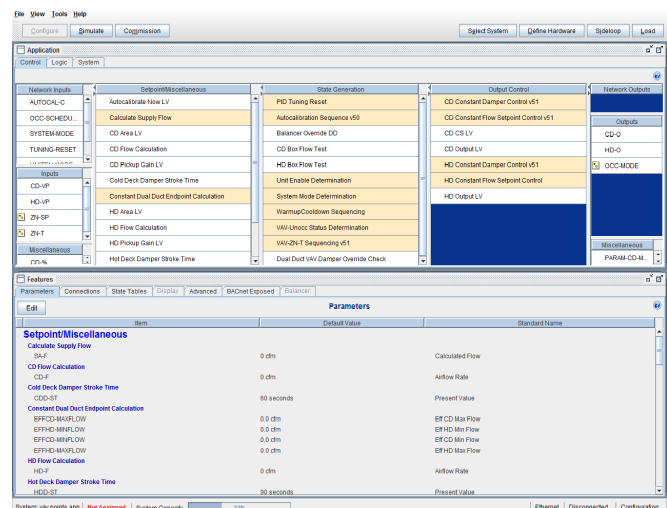
A Commissioning mode-only version of the FX-PCT software is available for individuals having only commissioning tasks (for example, balancing contractors). The Configuration and Simulation modes are disabled in the FX-PCT Commissioning mode only software.

Refer to the *FX-PCT Installation Instructions (LIT-12011673)* and the *Controller Tool Help (LIT-12011147)* for details.

## Features

- capability to customize standard control system logic that is created from simple system selection trees
- consistent user interface across the Configuration, Simulation, and Commissioning modes
- flexible connection capabilities for loading and commissioning controllers; ability to download, upload, and upgrade multiple controllers at once

Figure 1: FX-PCT



## Selection Chart

Table 1: Selection Chart

Code Number	Description
FX-PCT-0	Facility Explorer Programmable Controller Tool (FX-PCT) on DVD, includes both the full and commissioning-only versions. For new users.
FX-PCT-6	Facility Explorer Programmable Controller Tool (FX-PCT), includes both the full and commissioning-only versions. For upgrading existing users only.

## FX-PCT Technical Specifications

Table 2: FX-PCT System Requirements

<b>Recommended Computer/Server Platform</b>	Intel® Core™ 2 Duo E6700 or better (Intel Core 2 Duo E4300 minimum) 20 GB free hard disk available (600 MB minimum) DVD drive
<b>Recommended Memory</b>	Computer Platforms: 2 GB RAM recommended (1 GB RAM minimum) Server Platforms: 4 GB RAM recommended (2 GB RAM minimum)
<b>Supported Operating System (OS) and Database Software</b>	<p><b>Windows® 8 and Windows 8 Pro (64-bit)</b> Microsoft SQL Server™ 2012 Express software with SP1 (64-bit) Microsoft SQL Server 2008 R2 Express with SP2 (64-bit)</p> <p><b>Windows 8 and Windows 8 Pro (32-bit)</b> Microsoft SQL Server™ 2012 Express software with SP1 (32-bit) Microsoft SQL Server 2008 R2 Express with SP2 (32-bit)</p> <p><b>Note:</b> cTool applications (for example, HVACPro or GX) cannot be installed on 64-bit platforms. <b>Note:</b> We recommend Windows 8 for users that need cTools.</p> <p><b>Windows 7 Professional, Enterprise, and Ultimate Editions (64-bit) with SP1</b> Microsoft SQL Server™ 2012 Express software with SP1 (64-bit) Microsoft SQL Server 2008 R2 Express with SP2 (64-bit)</p> <p><b>Windows 7 Professional, Enterprise, and Ultimate Editions (32-bit) with SP1</b> Microsoft SQL Server™ 2012 Express software with SP1 (32-bit) Microsoft SQL Server 2008 R2 Express with SP2 (32-bit)</p> <p><b>Note:</b> The OS and software must both be 32-bit or 64-bit. <b>Note:</b> cTool applications (for example, HVACPro or GX) cannot be installed on 64-bit platforms.</p> <p><b>Windows XP® Professional Edition (32-bit) with SP3</b> Microsoft SQL Server 2008 R2 Express with SP2 (32-bit)</p>
<b>Required Web Browser Software</b>	Windows Internet Explorer® Version 8, 9, or 10 <b>Note:</b> The Internet Explorer web browser is required to use the FX-PCT Help.
<b>Network Communication</b>	Ethernet network interface card 10/100 Mbps (100 Mbps network recommended)
<b>Software Optionally Installed During FX-PCT Install</b>	Microsoft .NET Framework Version 3.5 with SP1 or 3.5.1 Microsoft SQL Server 2008 R2 Express software
<b>Additional Requirements (Order Separately)</b>	Bluetooth® Commissioning Converter (FX-BTCVT-1) Laptop with Bluetooth® wireless communications or a computer with a USB Bluetooth converter USB Dongle with ZigBee™ Driver (ZFR-USBHA-0) provides a wireless connection through the FX-PCT to allow wireless commissioning of the wirelessly enabled FX-PC controllers. Also allows use of the FX-ZCT in FX-PCT. Adobe® Reader® software <b>Note:</b> A PDF reader software is required for the Print function in FX-PCT.
<b>Optional Hardware</b>	Any network or local printer supported by the qualified Windows operating system



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