

# PHOENIXKONNECT INSTALLATION GUIDE





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#### Introduction

PhoenixKonnect (PK) is a software application that supports data acquisition from SDVXI-only, MECALC-only or combined hardware configurations. The purpose of this document is to describe the process for installation of the PK application and associated drivers to support this broad range of hardware.

#### System Requirements

PK targets the Windows@10 (or higher) operating system. The recommended configuration of the host computer (PC or laptop) is:

- Intel i7 Processor
- 17.3-inch Monitor (Touch optional)
- 16GB DDR4 RAM
- 1TB SSD Hard Drive
- Gigabit Ethernet Adapter
- Windows®10 / 11 Professional

#### PK Downloads

Application and driver installation files are available for download at: <u>https://www.phoenixkonnect.com/downloads</u>

MECALC systems connect to the computer via Ethernet. SDVXI chasses connect to the computer with one or both of the these controllers:

- USB
- EX2500a (Ethernet)

The table below details the files available on the download page and the configurations they support:

MECALC	SDVXI +	SDVXI +
	EX2500	USB
$\checkmark$	$\checkmark$	<ul> <li>✓</li> </ul>
$\checkmark$		
	$\checkmark$	<ul> <li>✓</li> </ul>
	$\checkmark$	<ul> <li>✓</li> </ul>
	$\checkmark$	
	$\checkmark$	
	$\checkmark$	
	MECALC ✓	MECALC         SDVXI + EX2500           ✓         ✓           ✓         ✓           ✓         ✓           ✓         ✓           ✓         ✓           ✓         ✓           ✓         ✓           ✓         ✓           ✓         ✓           ✓         ✓           ✓         ✓           ✓         ✓           ✓         ✓           ✓         ✓           ✓         ✓

Table 1: PK Download Files





# File Staging Area

The driver and installation files downloaded from the PK website should be staged in a protected folder on the local hard drive. This is useful for diagnostic and troubleshooting purposes. The best location for this folder depends on the user's environment. It simply needs to be somewhere that automated "cleanup" tools will not remove. Example locations might be:

- C:\Users\Public\Documents\PK\_DO\_NOT\_DELETE (for compliance with Windows security)
- C:\PK\_DO\_NOT\_DELETE (if user or public profiles are managed remotely or on a network)

# Order of Operations

It is recommended that installers be applied in the following order:

- 1. If using SDVXI Hardware
  - a. NIVXI 16.0 (includes USB controller support)
- 2. If using an EX2500a ethernet Controller
  - a. Agilent VISA
  - b. EX2500A VXI Controller Driver 32B
  - c. EX2500A VXI Controller Driver 64B
- 3. PhoenixKonnect





#### **Installation for SDVXI Hardware**

#### Step 1: NIVXI 16.0 Driver

Download and run the **NIVXI1600.EXE** setup file. After file extraction, select "Install NI-VXI for Windows. Advance through the screens as shown below accepting the defaults (except where indicated):









-VXI for Windows 16.0		- 🗆 🗙	III NI-VXI for Windows 16.0 - X
License Agreement You must accept the licenses displayed below to	o proceed.	NATIONAL INSTRUMENTS	Vou must accept the licenses displayed below to proceed.
M			Microsoft Silverlight 5 EULA Microsoft Silverlight 5 Privacy Statement
NATIONAL INSTRUMENTS SOFT	WARE LICENSE A	GREEMENT	MICROSOFT SOFTWARE LICENSE TERMS
ULLY READ THIS SOFTWARE LICE	NSE AGREEMENT CAG	REEMENT') BY	MICROSOFT SILVERLIGHT 5
ALLI ACAD HE SOFTWARE NODOR LICE CADING THE SOFTWARE AND/OR CL REEMENT, IF YOU DO NOT WISH TO BE NO BY ITS TERMS AND CONDITIONS, D TURN THE SOFTWARE (WITH ALL AC CONTAINERS) WITHIN THIRY (20) DAYS INTAINERS) WITHIN THIRY (20) DAYS TO NIS THEN-CURRENT RETURN F ON BEHALF OF AN ENTITY, YOU AGREE TO TO HERALF OF AN ENTITY, YOU AGREE	ICKING THE APPLICAB AGREE TO BE BOUND B COME A PARTY TO THIS A O NOT INSTALL OR USE COMPANYING WRITTEN OF RECEIPT. ALL RETUR POLICY. IF YOU ARE AC THAT YOU HAVE AUTHOR	ACECHINY, BI ALE BUTTON TO BY THE TERMS OF AGREEMENT AND THE SOFTWARE, MATERIALS AND INS TO NI WILL BE COEPTING THESE RITY TO BIND THE	These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft <ul> <li>updates (including but not limited to bug fixes, patches, updates, upgrades, enhancements, new versions, and successors to the software, collectively called "updates"),</li> <li>supplements,</li> </ul>
are to which this National Instruments license applie	es is NI-VXI for Windows 16.0.		The software to which this third-party license applies is distributed with NI-VXI for Windows 16.0.
	I accept the above 2 Lice	ense Agreement(s).	(a)   accept the above 2 License Agreement(s).
	O I do not accept all these I	License Agreements.	O I do not accept all these License Agreements.
	<< Back Next >	>> Cancel	<< Back Next>>> Cancel
-VXI for Windows 16.0		- 0	I NI-VXI for Windows 16.0
Driver Software Installation Always trust software from National Instrum	ments	NATIONAL	Disable Windows Fast Startup Disable Windows Fast startup to prevent problems with installing or removing INATIONAL Instruments
rora d'annerique d'interaport, i you d'acte more Microsoft Windows security dialogs. ☑ Always trust software from National Instru	ments Corporation.	Next >> Cancel	Windows Fast Startup Information         Disable Windows fast startup to prevent problems with installing or removing hardware.
	<< Back	Next>> Lancel	Cancel
II-VXI for Windows 16.0			
Start Installation Review the following summary before cont	tinuing.	<b>NATIONAL</b> INSTRUMENTS	Installation Complete NATIONAL INSTRUMENTS
Adding or Changing • NIV30 16.0 Run Time Support NIV35A 16.0 Runime Support Configuration Support Development Support Examples			NI-VXI for Windows has been successfully installed.

PhoenixKonnect Installation Guide

. Click the Next button to begin installation. Click the Back button to change the installation settings.

Save File... << Back Next >> Cancel



<< Back Next >> Finish





**Restart the computer** 

🤨 NI Update Service		x
National Inst	ruments Software Updates A	vailable
	4 new updates available	
	View Updates	Remind Me Later

**Decline the NI Updates** 





## Step 2: Enable NIVisaTulip in NIMAX

# This step is only needed to install the EX2500a ethernet controller. If there only USB controllers present in SLOT 0 of the chassis, skip this step.

Run National Instrument's **NIMAX** – *Measurement and Automation Explorer* application. Configure the settings shown below:

ile Edit View T	ools Help		
<ul> <li>✓ ➡ My System</li> <li>✓ ➡ Devices</li> <li>▲ Network</li> <li>&gt; ➡ Software</li> </ul>	NI I/O Trace NI Registration Wizard Create Desktop PC Utility USB Drive	+	
😫 Remote Sys	NI-VISA		VISA Interactive Control
	NI-VXI	•	VISA Options
	Reset Configuration Data	T	DESITION ONTODO

Go to Tools > NI-VISA > VISA Options



Close the application

# Step 3: Install Agilent Visa (Agilent Connection Expert)

This step is only needed to install the EX2500a ethernet controller. If there are only USB controllers present in SLOT 0 of the chassis, skip this step.

Download the file from the **Agilent Visa** link on the PK downloads page. Run the "IOLibSuite\_16\_3\_16603.exe" installer file "**As Administrator**" (right-click on the EXE file and choose "Run as Administrator").









Agilent IO Libraries Suite 16.3 - InstallShield Wizard



Important: <u>Must</u> be installed as **Secondary** VISA Make sure NIVXI1600 is installed first





Click **Ok** to move past this screen







Step 4: Install the EX2500A Controller Drivers (32B and 64B)

# This step is only needed to install the EX2500a ethernet controller. If there are only USB controllers present in SLOT 0 of the chassis, skip this step.

Download the file "EX2500A\_32B\_R2p5p0.zip". Extract the contents of the zip file to a temporary location. Open the folder "EX2500A\_32B\_R2p5p0" and run "setup.exe".

[	EX2500A_32B_R2p5p0		
	Name	Date modified	
	EX2500A_32Bit_Driver_Setup_Release_Not	9/25/2013 9:37 AM	
	🔀 Install_x86.msi	1/9/2014 8:53 PM	
	🔂 setup.exe	9/13/2012 5:02 PM	
L			
N VT FY25014 (v80 Setur			~
For the following components:	- 🖾 Windows Features	X	^
.NET Framework 3.5 SP1	An ann on your PC needs the following Windows feature:	The following feature was successfully installed:	
Please read the following license agreement. Press the page down key to see the rest of the agreement.	NET Framework 3.5 (includes .NET 2.0 and 3.0)	.NET Framework 3.5 (includes .NET 2.0 and 3.0)	
MICROSOFT .NET FRAMEWORK 3.5 FOR MICROSOFT WINDOWS OPERATING SYSTEM	Ownload and install this feature Windows will get the files that it needs from Windows Update and complete the installation.	You might need to restart apps that require this feature.	
Microsoft Corporation (or based on where you live, one of its			
Wew EULA for printing	$\rightarrow$ Skip this installation		
Do you accept the terms of the pending License Agreement?	rour apps might not work correctly without this feature.		
If you choose Don't Accept, install will close. To install you must accept this agreement.	Tell me more about this feature		
Accept Don't Accept	Cancel	d	se

If prompted, install the required .NET framework

Download the file "EX2500A\_64B\_R2p5p0.zip". Extract the contents of the zip file to a temporary location. Open the folder "EX2500A\_64B\_R2p5p0" and run "setup.exe". Follow the same steps as shown for the 32-bit driver installation.

## Step 5: Verify Connectivity to the EX2500a Controller

This step is only needed to install the EX2500a ethernet controller. If there are only USB controllers present in SLOT 0 of the chassis, skip this step.





Before the Agilent Visa application can be configured, it is important to verify that the EX2500a controller has acquired an IP address on the PC's network. There are two common scenarios:

- 1. The EX2500a is connected to the same network as the PC. The default configuration for the EX2500a is DHCP (dynamic host control protocol) which means the controller will automatically acquire an IP address from the network. This guide will address the setup for this scenario.
- The EX2500a is connected directly to an ethernet port on the PC or another LAN. In this instance, there is no DHCP server available and the EX2500a reverts to a "Auto IP" address. The configuration of this architecture is outside the scope of this document. For assistance, please contact <u>support@computer-methods.com</u>.







