# ADVANTECH Enabling an Intelligent Planet

## Advantech AE Technical Share Document

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Category	□FAQ ■SOP	Related OS	N/A
Abstract	ADAM-40XX, ADAM-41XX, ADAM-60XX and ADAM-62XX_How to use ADAM with		
	LABView		
Keyword	ADAM-40XX,ADAM-41XX,ADAM-60XX, ADAM-62XX, LABView.		
Related	ADAM-40XX, ADAM-41XX, ADAM-60XX and ADAM-62XX		
Product			

## Problem Description:

This documentation shows how to polling the I/O status of ADAM with LABView

## Brief Solution - Step by Step:

- 1. Download Modbus Library
- 2. Install Modbus Library to LABView
- 3. Find Modbus VI in User Libraries
- 4. Use Labview Modbus Examples

## [Steps]

## **Download Modbus Library**

In order to use Modbus RTU/TCP protocol, user need to download LABview Modbus Library, which provided by National Instruments.

Please download "nimodbus121.zip" from below link. http://ftp.ni.com/pub/devzone/epd/nimodbus121.zip

MODBUS Library for LabVIEW	
→ 列印	110 評分   <b>4.27</b> 之 5
概觀	
The MODBUS library is a free, downloadable set of Virtual Instruments (VIs) that p communication from any standard Ethernet or serial port. The LabVIEW library im protocol in software and offers both master and slave functionality. Using the Mod Programmable Automation Controllers (PACs) can communicate with gateway de connectivity to a wide variety of industrial networks, such as PROFIBUS, Ethernet	provide Modbus plements the Modbus bus library, evices that provide tIP, and DeviceNet.
下載	
檔案名稱: nimodbus121.zip 需求: View	

Version 1.2 (ni\_modbus\_1\_2.zip) of the MODBUS LabVIEW Library is backward compatible with previous versions of the library. It adds a set of polymorphic VIs that make it easier to use MODBUS commands. These new VIs are also fully documented with a help file. Comments have also been added to the

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### **Install Modbus Library to LABView**

- 1. Unzip nimodbus121.zip.
- 2. Open readme.html, and follow the steps to install Modbus library to LABView.

(In our example, we choose 86 folder, it's the latest version)



#### Installing NI-MODBUS Library

In order to use the Library in LabVIEW, please follow these steps:

- Close LabVIEW.
- If you have version NI-MODBUS Library 1.1 on your system, it is recommended to uninstall it by going to Control Panel -> Add Remove Programs
   -> National Instruments Software and select NI Modbus 1.1 from the list.
- Copy NI Modbus.llb from the ##\vi.lib folder to the LabVIEW\_ROOT\vi.lib directory where ## is your LabVIEW version (example 86 for 8.6) and is
  the root folder where you installed LabVIEW.
- Copy lvmodbus.chm and lvmodbus.txt from ##\help to the LabVIEW\_ROOT\help directory.
- Copy nimodbus.mnu from ##\user.lib to the LabVIEW\_ROOT\user.lib directory.
- Restart LabVIEW. You should see the NI Modbus palette in the User Libraries palette.

To Uninstall the Library, remove all the files copied from the previous steps.

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## Find Modbus VI in User Libraries

After installed Modbus Library to LABView, user can find Modbus VI in User Libraries, and start to edit their own program.

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### **Use LABVview Modbus Examples**

LABView Modbus Library provides many Modbus examples.

To find those examples, user can open NI Modbus.llb in nimodbus121.



## Example: Read ADAM-4022T by Modbus RTU

**MB Serial Example Master.vi** was chosen to read AI value of ADAM-4022T by Modbus RTU. Setup correct parameters according your computer/device.



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## Example: Write ADAM-6024 by Modbus TCP

**MB Ethernet Example Master.vi** was chosen to write DO value of ADAM-6024 by Modbus TCP. Setup correct parameters according your computer/device.

