

# Operating a Mercury Gige and USB3.0 Camera with NI MAX

Version: V1.0.31

Date: 2018-03-19

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## 1. Introduction

The MERCURY series camera is DAHENG IMAGING's mature area scan industrial digital camera, featuring mega pixels resolution, high definition, extremely low noise, perfect color conversion and compact design. The MERCURY family cameras include Gige cameras USB2.0 cameras and USB3.0 cameras and so on.

Thanks to the extremely compact (29mm×29mm×29mm), robust metal housings and locking screw connectors, The MERCURY cameras can secure the reliability of cameras deployed in harsh environments.

National Instruments is a graphical programming language that has its roots in automation control and data acquisition. Its graphical representation, similar to a process flow diagram, was created to provide an intuitive programming environment for scientists and engineers

This document describes how to configure NI MAX so that MERCURY cameras are detected in NI MAX. Once the cameras are displayed in NI MAX, you can configure them as desired and acquire images.

## 2. Requirements

In this document the following software and hardware is needed:

NI16.0

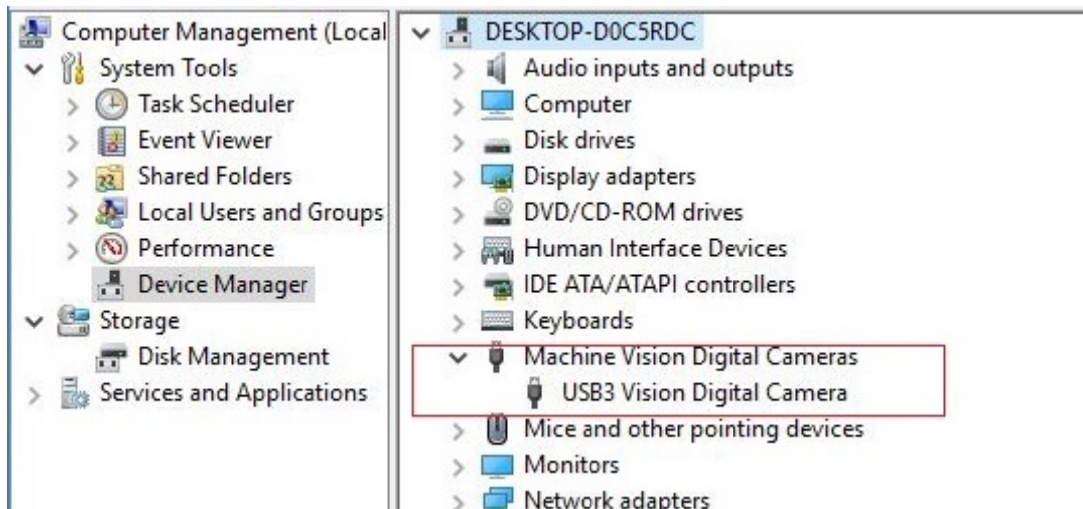
MER\_Setup\_en.exe for 1.0.1707.8261

Windows 10 Pro x64

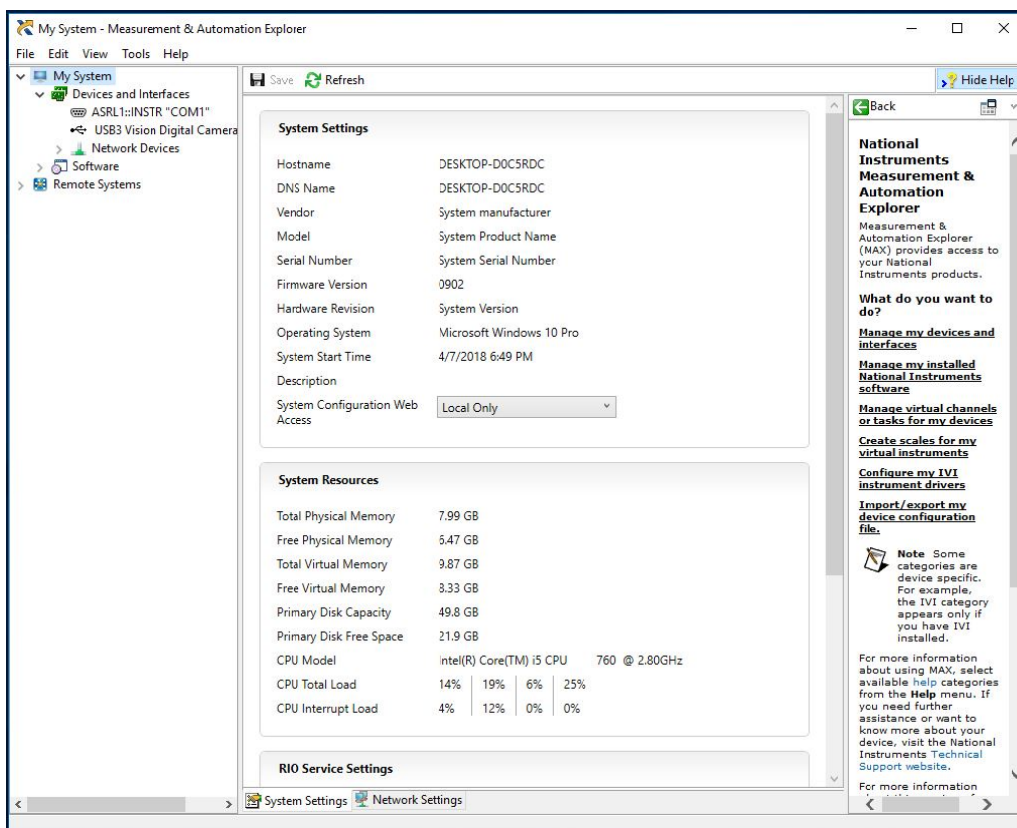
Test camera: MER-130-30UM    MER-503-36U3C    MER-125-30GC

### 3. Operating a MERCURY USB3 Vision Camera with NI MAX

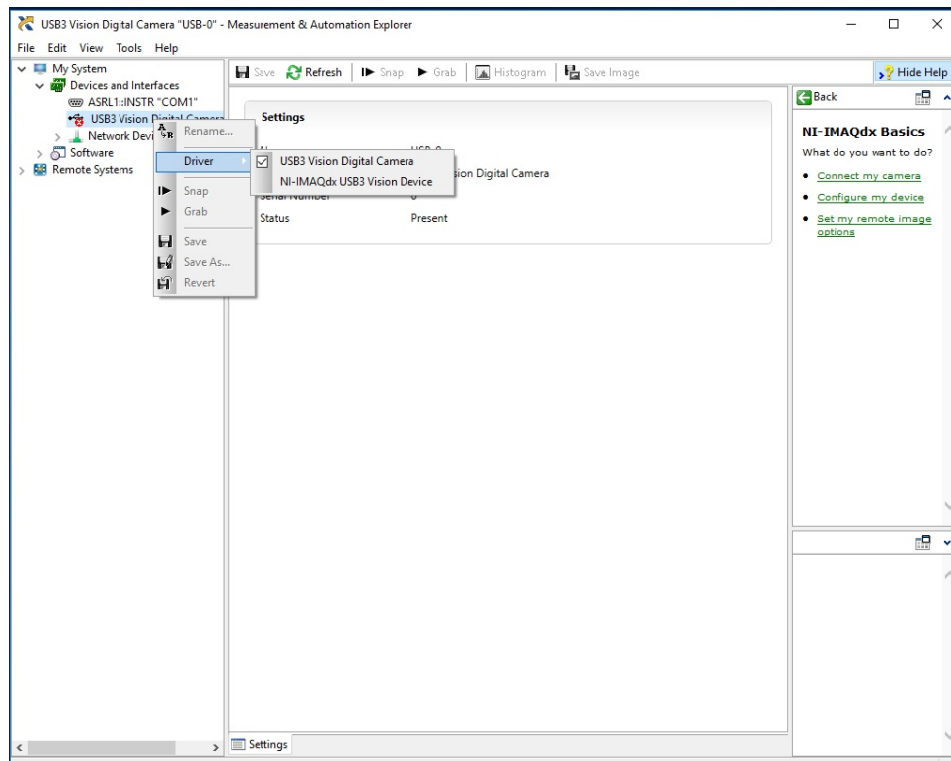
1 ) First install the Mercury camera driver. After the driver installation is completed, The USB camera is displayed in the Device Manager as follows:



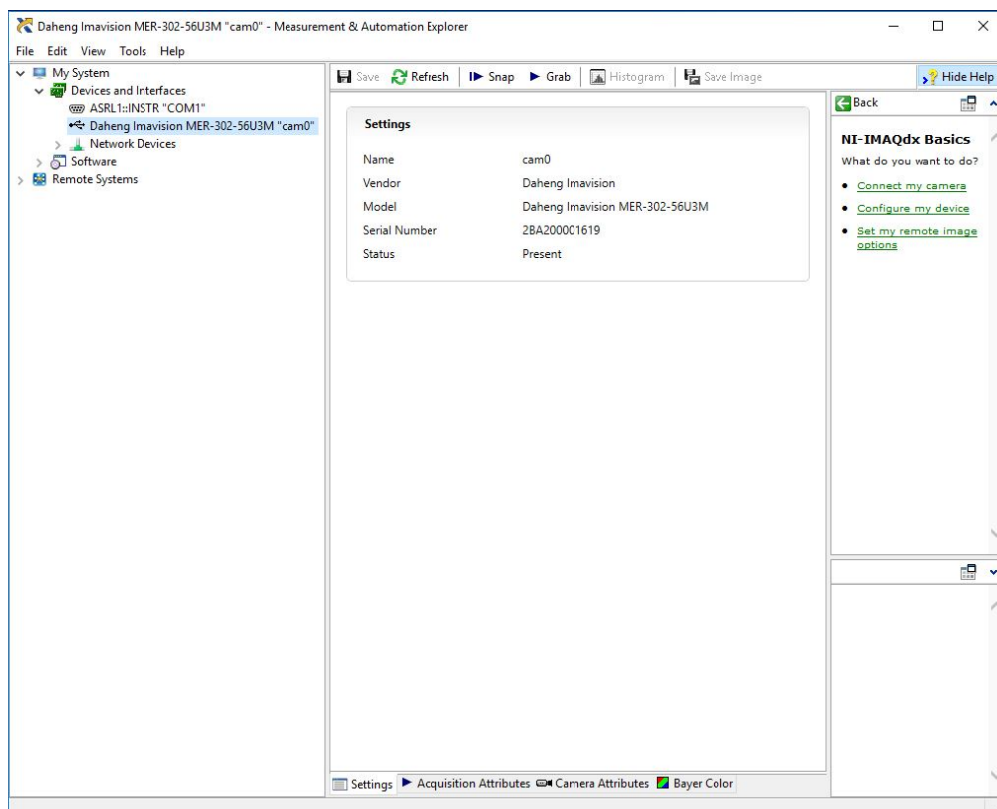
2 ) Open NI after installing NI and VAS installation package, the following interface appears:



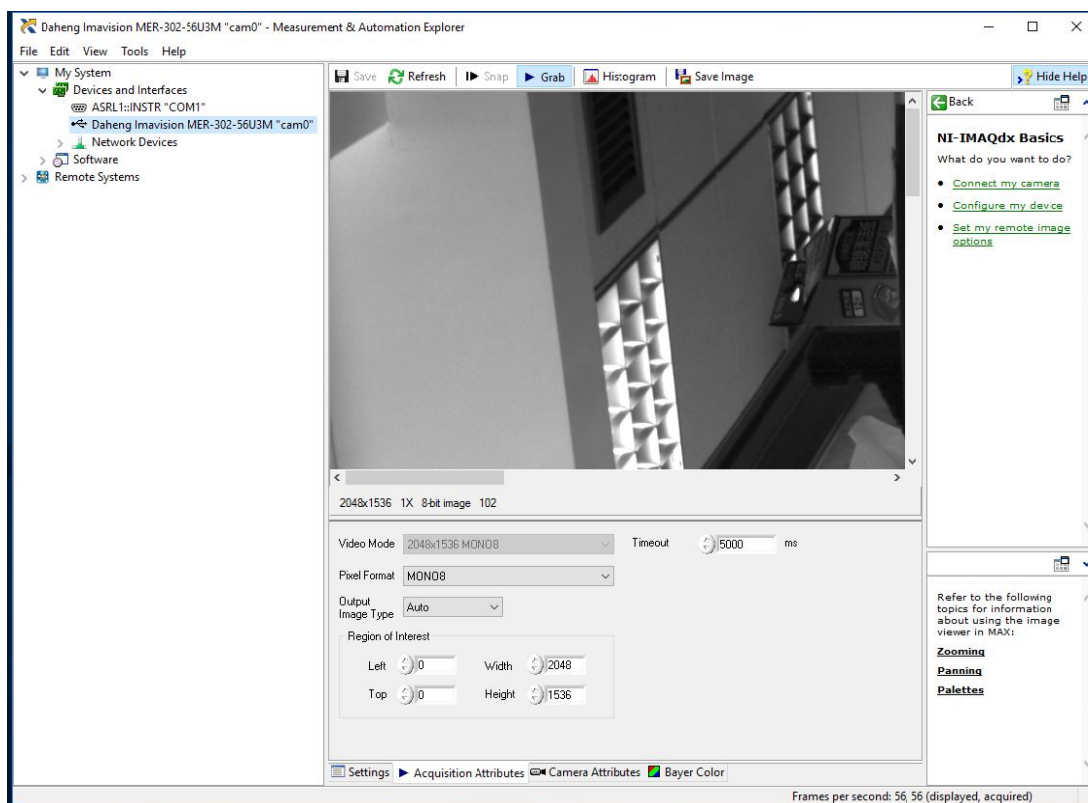
3 ) Switch the camera driver under NI, use USB3.0 as an example, right-click the camera driver USB3 Vision Digital Camera, select Driver and select NI-IMAQdx USB3 Vision Device;



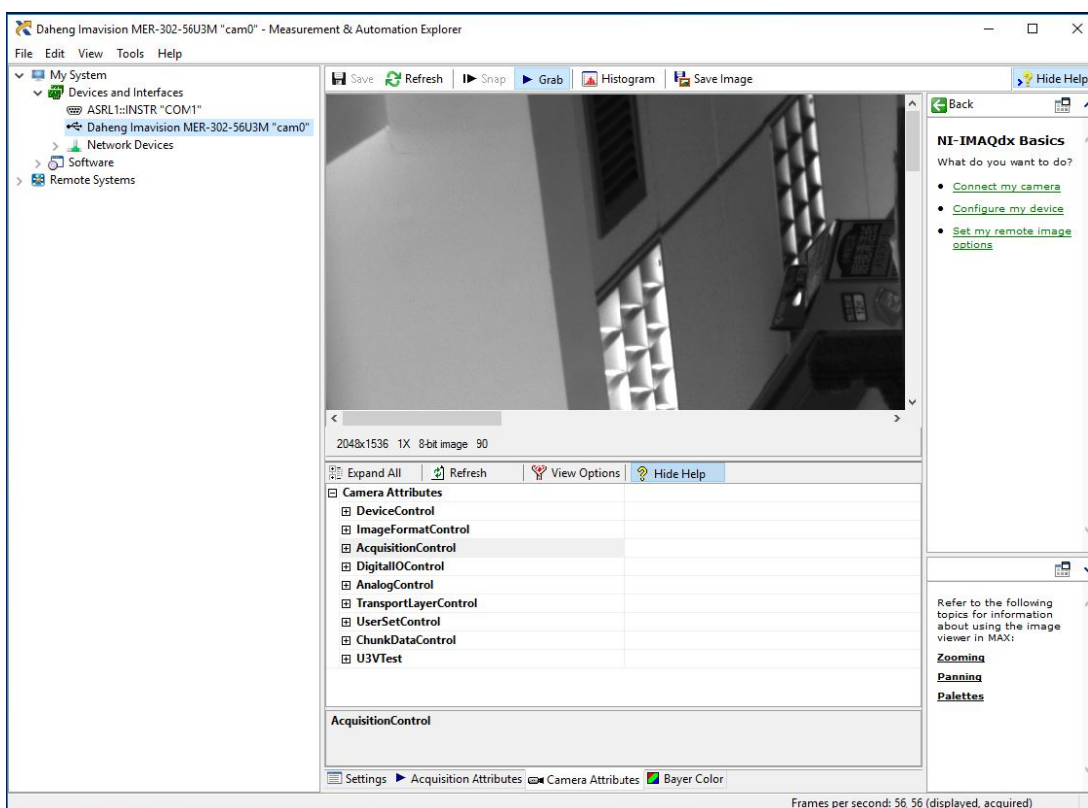
The interface is as shown below after switch the camera driven,



4 ) Double-click the changed camera driver and click Grab to display the image in real time



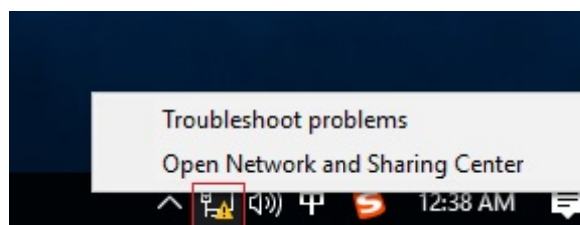
5 ) In the Camera Attributes tab below, you can modify parameters such as exposure time



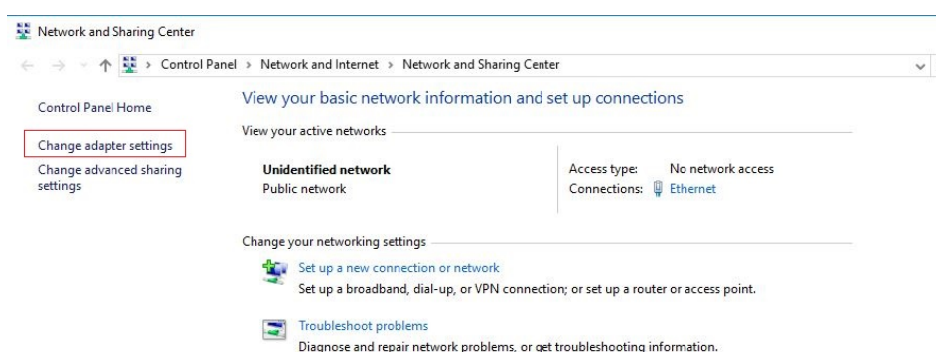


## 4. Operating a MERCURY Gige Vision Camera with NI MAX

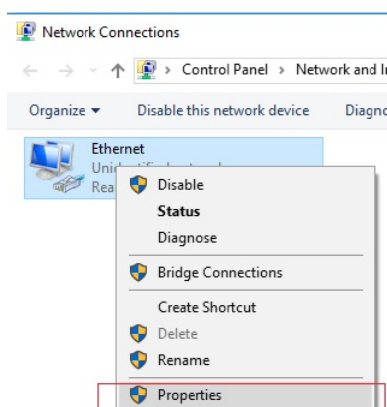
1 ) First install the Mercury camera driver. After the driver installation is completed, Configure network adapter , Right click **Network** and select **Open Network and Sharing Center**



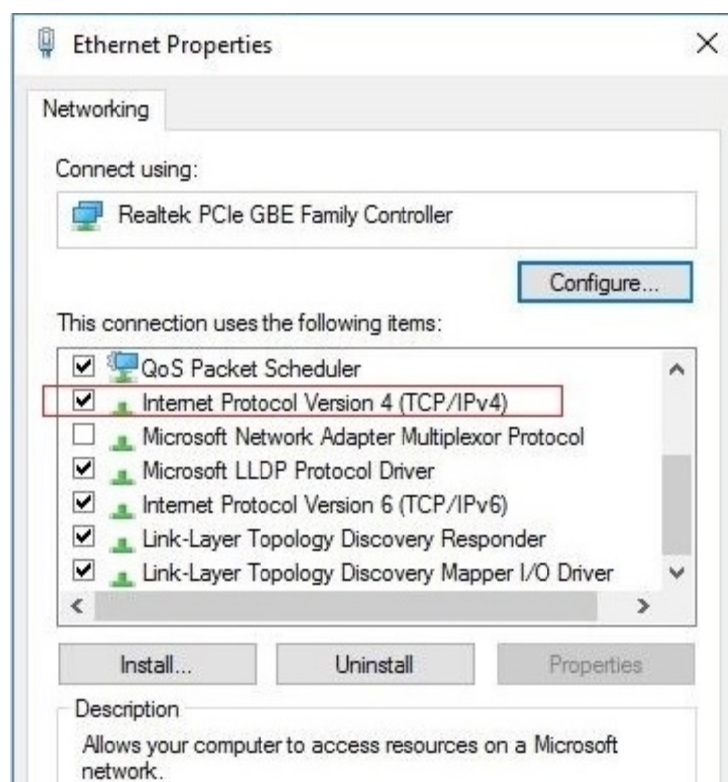
2 ) Click Change adapter settings



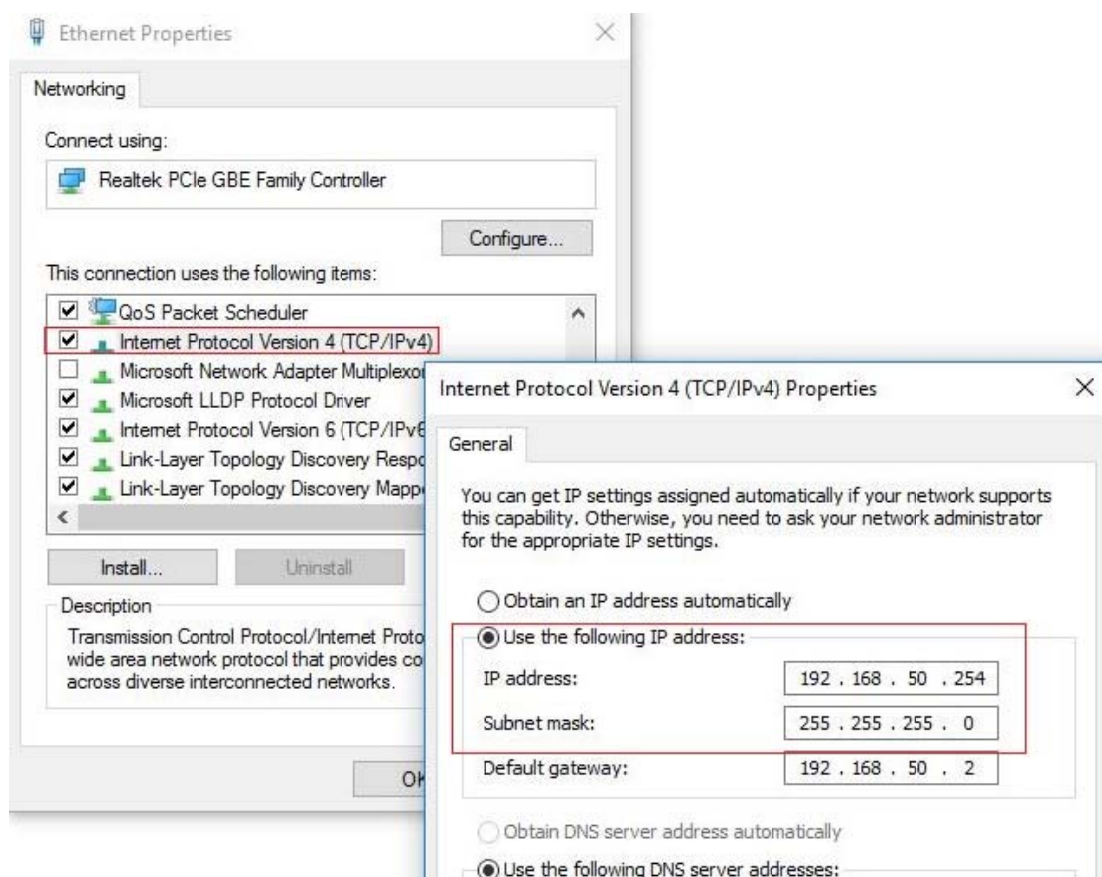
3 ) Find the corresponding network in the **Network Connections** dialog box, right-click and select Properties.



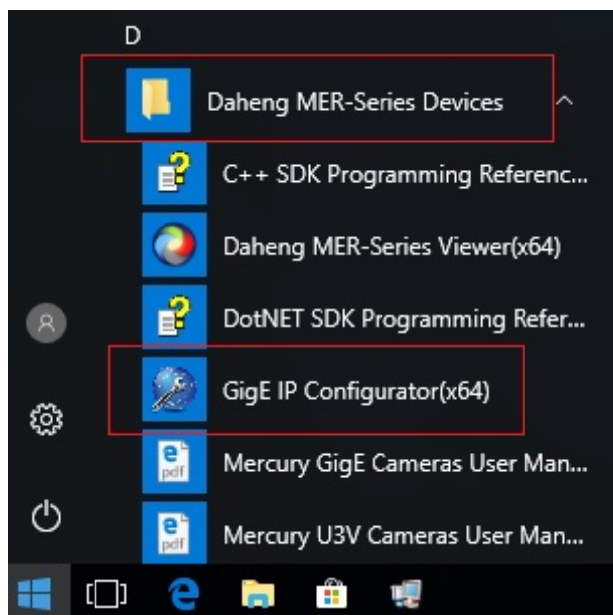
4 ) Select TCP/IPV4



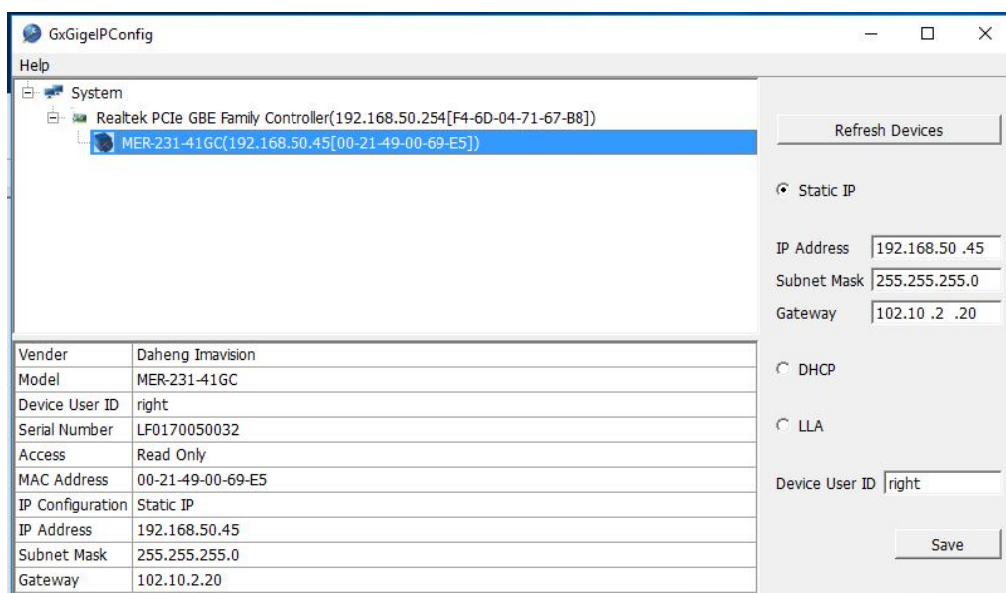
5 ) After enter Use the following IP address, configure the network adapter IP with Use the following IP address .



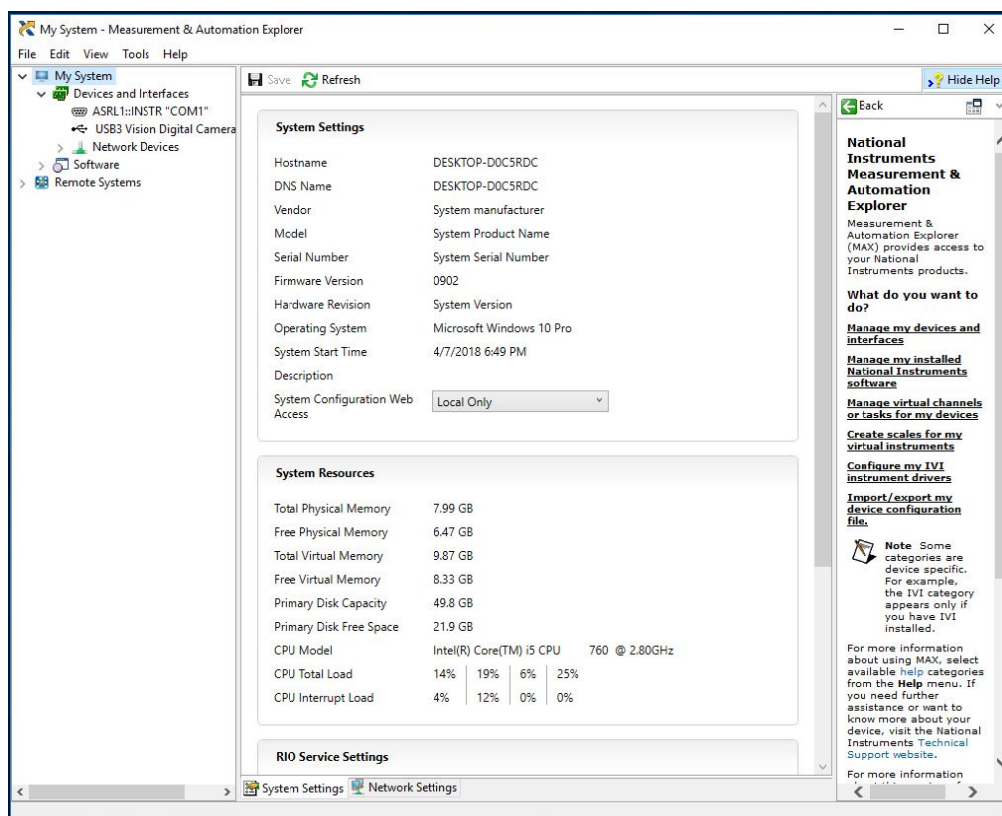
6 ) Configure the camera's IP after finishing the network card IP configuration . Find **Gige IP Configurator** in the **Daheng MER-Series Devices** folder in the start menu.



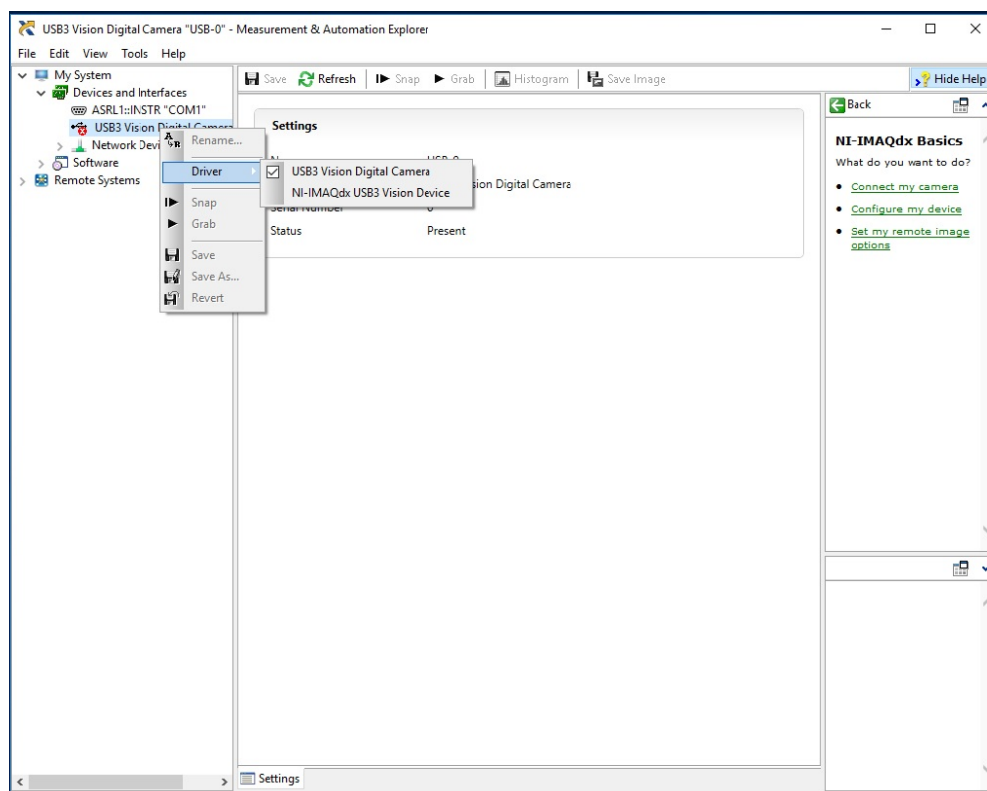
7 ) In the **GxGigEIPConfig** you can see the camera, select **Static IP** to configure the camera IP, and ensure that the camera IP and network card IP are in the same network segment , then save the configuration after completion



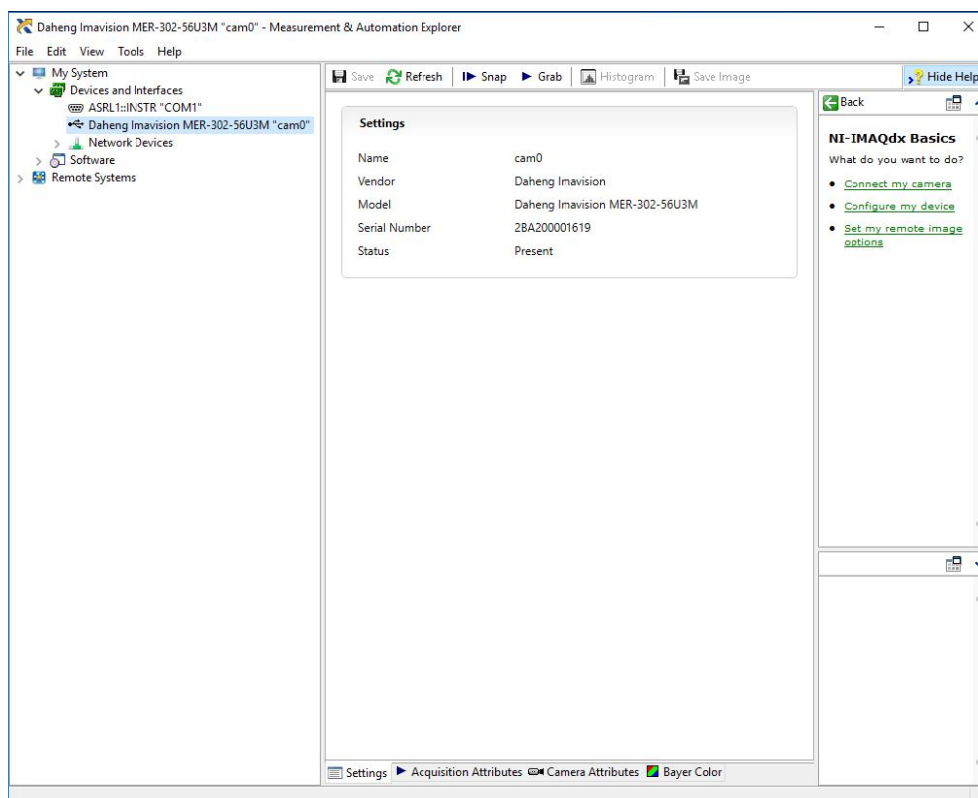
8 ) Open NI after installing NI and VAS installation package, the following interface appears:



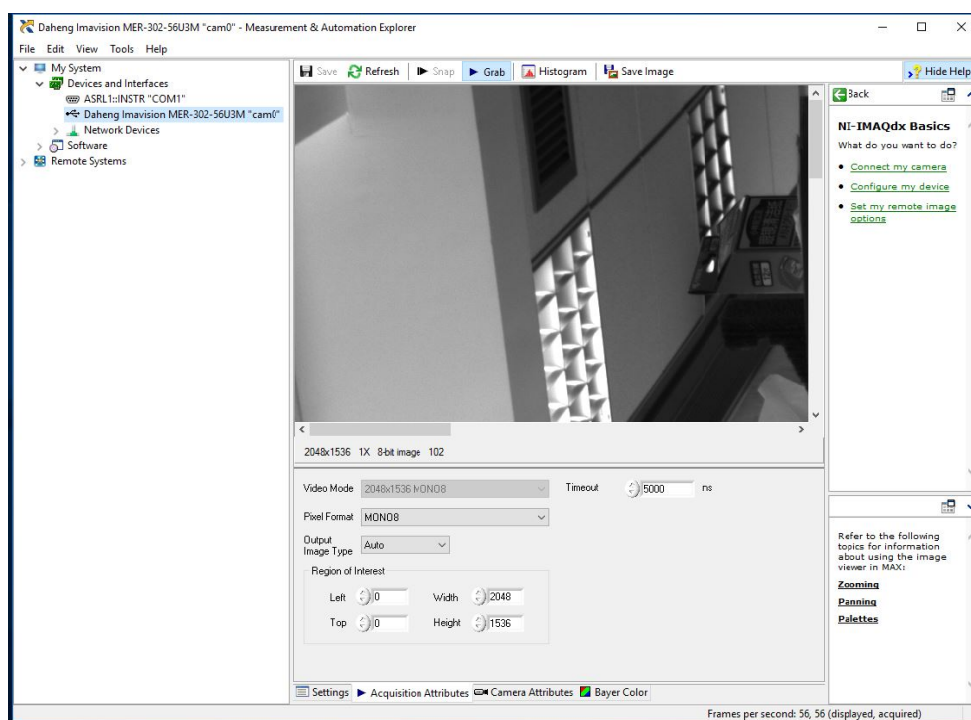
9 ) Switch the camera driver under NI, use USB3.0 as an example, right-click the camera driver USB3 Vision Digital Camera, select Driver and select NI-IMAQdx USB3 Vision Device;



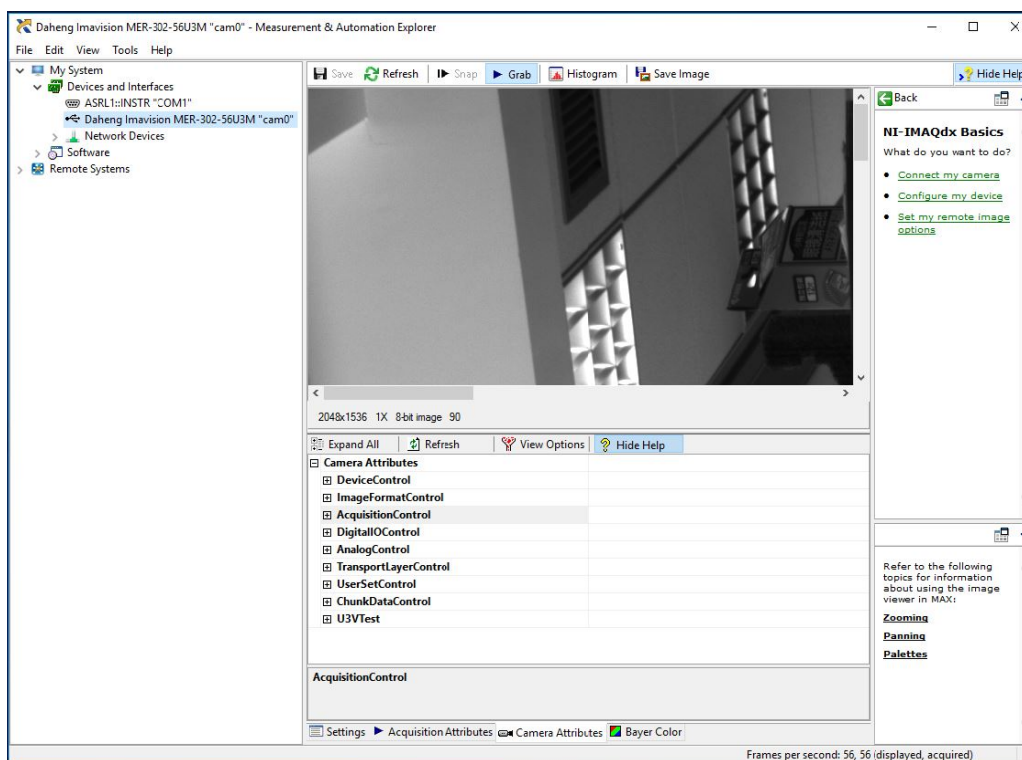
The interface is as shown below after switch the camera driven,



10 ) Double-click the changed camera driver and click Grab to display the image in real time



11 ) In the **Camera Attributes** tab below, you can modify parameters such as exposure time



## 4 ) Revision History

No.	Version	Changes	Data
1	V1.0.0	Initial release	2018-0413