

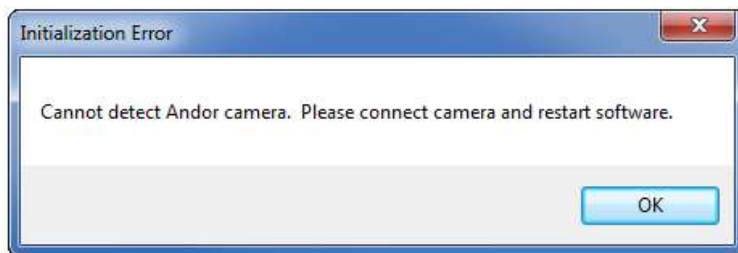
Troubleshooting Andor Zyla USB3.0 and iStar_{sCMOS}

Applicable to Zyla (USB3.0 only) and iStar_{sCMOS}

When initially setting up the Zyla USB 3.0 or iStar sCMOS camera, often queries arise related to the hardware configuration (camera and PC). If not set up correctly, the following error messages may return from Andor software under certain camera configurations.

Communication Error

Andor Solis:



Andor SDK:

AT_ERR_OUTOFRANGE (6)

The out of range error will appear if the handle returned from AT_Open is '-1' indicating that an available camera could not be found.

Acquisition Timeout Error

Andor Solis:



Andor SDK:

AT_ERR_TIMEDOUT (13)

A time out error will return from AT_WaitBuffer if the function times out while waiting for data arriving in output queue. In the context of this document, a timeout error may be related to insufficient bandwidth or HDD/SDD write speeds (if spooling to disk).

If the PC meets the required specification to run the camera, please follow the chart on the next page to diagnose and resolve the problem. (if unsure, please refer to the PC requirements on the camera Specification Sheet^[1] at www.andor.com for this information).



Is the error message a *communication error*? (Details on previous page)

Yes

Is the camera buzzer audible when powered ON?

No

Is the error an *Acquisition Timeout*? (Details on previous page)

Yes

Yes

Check the following:

- Power is connected to the camera and the camera is switched ON
- The USB cable is securely and correctly connected between the camera and the PC
- Check that the Zyla drivers have been correctly installed from the Device Manager

Is the camera connected to the Startech PCIe USB3.0 card supplied with the camera?

Yes

No

Install the Startech PCIe card to a x4 Gen2.0 PCIe Slot. Consult the PC User Manual if you are unsure which slot to use.

Note: On-board PC USB3.0 ports or USB 3.0 PCIe cards not supplied by Andor cannot be guaranteed.

Are the Startech USB3.0 card drivers installed correctly?

This can be checked from the Windows Device Manager. The card should appear as '*Renesas USB 3.0 Host Controller*'.

(The Windows Device Manager can be found at *Control Panel >> System >> Hardware >> Device Manager*)

Yes

No/
Unsure

If you need to install the Startech drivers, they can be downloaded from the following link

<http://www.startech.com/Downloads>

Enter product code **PEXUSB3S25** to locate the correct driver.

Is the Startech USB3.0 PCIe card inserted to a suitable Gen2.0 PCIe slot?

Gen1.0 slots (some x1 PCIe slots tend to be Gen1.0) may result in limited bandwidth. Usually a x4 PCIe slot will be sufficient.

Yes

No/
Unsure

Install the Startech PCIe card to a x4 Gen2.0 PCIe Slot. Consult the PC User Manual if you are unsure which slot to use.

Note: On-board USB3.0 ports or USB 3.0 PCIe cards not supplied by Andor cannot be guaranteed.

Have the power management settings of the Startech card been disabled?

No/
Unsure

From Windows *Device manager*, select *Properties* from the *Renesas USB 3.0 Host Controller*, go to the *Advanced* tab and ensure the check box is selected



If you are still having problems, please contact your local Andor Support Representatives at <http://www.andor.com/Support>

Yes

Useful links

^[1] Zyla Specification Sheet - <http://www.andor.com/scientific-cameras/neo-and-zyla-scmos-cameras>

^[2] Technical Article – PC Specifications for sCMOS

<http://www.andor.com/learning-academy/pc-specifications-for-scmos-technical-article>

^[3] Product Support - <http://www.andor.com/ContactSupport>