# **Neo Quick Start Guide**





### **Prepare your Facility**



Handle the camera and accessories with care.



Observe anti-static precautions when installing the controller card and camera.



Ensure 100 mm clearance around camera and power supply vents (Do **not** block vents when operating on benchtop).



Operation of the camera close to intense pulsed sources (e.g. plasma and X-ray sources) may compromise performance.



Keep dry, <70% humidity non-condensing.



Use correct power supply and cables.

Store between -10°C and 50°C. Operate between 0°C and 30°C.



For information on water cooling, please refer to the user manual.

Refer to the user manual for further information



3 Install Software (Solis or SDK)

#### You must have administrator access on your PC to perform this installation.

These instructions cover installation of both Andor Solis and Andor SDK if ordered. A copy of the software is provided within the camera box. Additionally, the latest software files are available to download on request, please sign in or create an account at andor.oxinst.com/downloads

Windows: Switch on the PC, run the setup exe from the supplied copy or the downloaded file: e.g. AndorSDK3Setup-<version>.exe.

- 1. Confirm the version of software (minimum is v3.14.x).
- 2. Follow the on screen prompts.
- 3. Select the installation directory when prompted.
- 4. If prompted for camera type select Neo.
- 5. On the final window click on "Install". Continue to follow the on screen prompts.
- 6. To complete the installation, when prompted select "Yes, restart the computer now" and click on the finish button.

#### Linux:

For detailed instructions on how to install the SDK3 drivers on Linux please refer to Section 1.5.2 in the Andor Software Development Kit Manual, available at andor.oxinst.com/downloads.





## Install the Camera Link PCIe Card

Ensure your PC is powered off.

Ensure anti-static precautions and use the anti-static strap provided to prevent potential damage. Keep all screws safe.

- 1. Unplug all cables from the rear of the computer.
- 2. Remove the PC enclosure so as to gain access to the expansion slots.
- 3. Locate a PCIe x16, x8 or x4 slot. If you are unsure which PC slot is correct. please consult the PC user manual.
- 4. Remove the filler bracket corresponding to the slot you intend to use.
- 5. Remove the controller card carefully from its protective ESD packaging and firmly press the card connector into the chosen expansion slot and ensure it is securely locked in.
- 6. Making sure that the card's mounting bracket is flush with any other mounting brackets or filler brackets to either side of it, secure the controller card in place.
- 7. Replace the cover of the computer and secure it with the mounting screws if applicable.
- 8. Reconnect any accessories you were using previously.
- 9. For PCs not supplied by Andor, refer to Setting & Checking BIOS options.

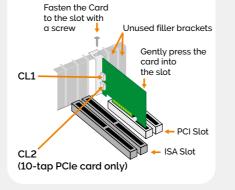
#### Notes:

- Do not connect any other device to the PCIe card as this may interfere with normal camera operation or performance.
- Camera operation with PCIe cards not supplied by Andor cannot be guaranteed.

#### Checking & Setting BIOS options (for PCs not supplied by Andor)

Enter the BIOS menu when starting PC. For Dell workstations, press F12 at start-up and select System Setup in the One Time Boot Menu. For Dell workstations 3 options in the Performance menu of the BIOS need to be checked/ set:

- C-States Control Disable C-States.
- Intel Speed-step Disable Speed-step.
- Memory Node Interleaving Set from NUMA to SMP. Note: This option is only available on larger workstations with 2 physical processors and may have a different name- ensure that NUMA is disabled.



## Connect the Camera and Switch it on



#### Mounting the Camera

• Attach the camera to lens or optical system using the camera C-mount (or F-mount) interface as required.

#### **Connecting the Signal and Power Cables**

- Before inserting the 12 V DC power connector to the rear of the camera, ensure the orientation is correct. Never forcibly insert the connector.
- Securely connect the camera link cable between the CL1 connector on the rear of the unit and the appropriate port on the PCIe card.
- If required connect the I/O expander cable to the 26 way I/O connector.
- Switch the Camera on using the ON/OFF switch.
- Turn on the PC.
- Start your software.
- View and adjust the acquisition settings as required.
- Start acquiring data.

#### Water Cooling Guidelines

If you require ultimate cooling please refer to the Neo user manual for guidelines on installation and operation.

Note: USB A to B cable also supplied (only used when updating firmware).



#### Camera buzzer does not sound on start-up

- The camera buzzer should be audible momentarily when the camera is switched to ON.
- If this does not occur, ensure that power is connected to the camera and the ON/OFF switch is set to ON.

#### Camera is not recognized by PC

- Ensure camera is switched to ON (The camera must be powered up before the software is initiated).
- Check that the camera cable(s) are securely and correctly connected between the camera head and the PCIe card in the PC (shown in step 4).
- Check that the PCIe card and drivers have been installed properly: Control Panel – System – Hardware – Device Manager – Imaging Devices (refer also to user manual Section 3.4 and 3.5.

### Please see the Hardware Guide for further information on Troubleshooting. Online access to technical documentation and software downloads is available at:

andor.oxinst.com/downloads

### Ensure that the Camera ON/OFF switch is in the OFF position AND your PC is switched OFF.

