## iStar sCMOS Quick Start Guide





# 2 Unpack the Camera

#### Camera

iStar sCMOS Camera



USB 3.0

PCIe Card

Documentation scan or visit:

andor.oxinst.com/



**Coolant Pipes** 

water cooled

models only

Software

(copy supplied)

Hex Key Set

(7/64, 3/32,

3.0 & 2.5 mm)

Essentials







Country Specific Power Cord





Cables



Gate Monitor Cable

SMA- BNC Cable x2

Anti-Static Strap

# Prepare your Facility



Handle the camera and accessories with



Use correct power supply and cables.



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



Operating Temperature 0°C to 40°C ambient Storage Temperature -20°C to 55°C



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.

Refer to the user manual for further information

## 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 <a href="mailto:andor.oxinst.com/downloads">andor.oxinst.com/downloads</a>

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 iStar sCMOS.
- 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 <a href="mailto:andor.oxinst.com/downloads">andor.oxinst.com/downloads</a>.





### Install the 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.

Secure the card

**USB 3.0** 

Connection

Unused filler brackets

Gently press the

card into the slot

- 1. Unplug all cables from the rear of the computer.
- 2. Open the PC enclosure to gain access to the expansion slots.
- 3. Locate a suitable PCIe slot: use an x4 or greater PCIe slot only. If you are unsure which 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 insert the card connector fully into the expansion slot.
- 6. Ensure the card's mounting bracket is flush with any other mounting or filler brackets to either side of it, then secure the controller card in place.
- 7. Replace the computer cover and secure with mounting screws if applicable.
- 8. Reconnect any accessories you were using previously.

#### Notes:

- Use only the USB 3.0 cable supplied by Andor.
- Do not connect any other device to the USB 3.0 (PCIe) card as this may interfere with normal camera operation or performance.
- Camera operation with USB 3.0 PCIe cards not supplied by Andor cannot be guaranteed.
- Windows 10 will install its own driver that works with the Startech card- versions prior to this must have drivers installed manually (see below).

#### Install the USB 3.0 PCIe Card Driver manually (not required for Windows 10)

USB 3.0 PCIe card drivers must be installed manually for PCs running versions prior to Windows 10. See Startech's website: www.startech.com/downloads enter product code PEXUSB3S25 and hit Search. If a later driver is available, download and install.

#### Disable Power Management for the "Renesas USB 3.0 Host Controller":

- 1. Navigate to 'Renesas USB 3.0 Host Controller' properties menu in **Device Manager** (Control Panel>Device Manager> Universal Serial Bus Controllers). Select the **Advanced** tab.
- 2. Check the Disable USB 3.0 power management functions checkbox.



### Connect the Camera and Switch it on

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

- Insert the 12 V DC power cable into the power connector at the rear of the camera, ensure the orientation is correct. NEVER forcibly insert the connector.
- Connect the supplied USB 3.0 cable between the USB 3.0 connector on the camera and the corresponding slot on the PCIe card.
- If required, connect the External Trigger and/or Output connectors.
- Switch the camera ON using the ON/OFF switch. You should hear an audible confirmation (a long beep).
- Turn ON the PC.
- Start your software.
- Check the acquisition settings and adjust as required.
- Start acquiring data.





## **Troubleshoot**

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

- The camera buzzer should be audible momentarily (a long beep) 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 and the PCle card in the PC (shown in step 5).
- Check that the PCIe card and drivers have been installed properly.
  (Control Panel System Hardware Device Manager Universal Serial Bus Devices).

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

MAN-11488 ISQSG 1021 R1

