

## Handling Guidelines for OEM or board-level cameras

### 1 Unpacking

Cameras are cleaned and tested in our Swiss Production facility. They are delivered sealed within dust and ESD protection bags. Image sensors are protected by a protection sticker.

To get the best results and avoid any damage or pollution when unpacking, please take care of the following:

- In OEM or board-level cameras, the electronics of the camera are not protected. Please follow known and established rules to avoid electromagnetic discharge (ESD) each time you handle the camera modules.
- Only open ESD protection bags within a dust reduced environment to avoid exposing the camera module to dust.
- Do not remove the sensor protection sticker at this stage!
- Do not dismantle the camera module PCB stack! Camera modules are tested and calibrated in our production facility in the same configuration as were sent to you. Failure to do so does not guarantee proper operation.

### 2 Usage

- Mount the camera module in your target device only in a dust reduced environment.
- **When handling the camera module, please use known ESD rules and always be grounded.**
- Only use suitable screws for mounting the camera module into your target device.
- Pay attention to torque tolerances when tightening screws. Do not overtighten!
- Connect only allowed cables with matching plugs.
- Soldering cables to any camera module PCB will void your warranty.
- Insert plugs only in the prescribed method.
- Once the camera module is properly mounted into your target device and right before mounting optics to the camera module you can remove the sensor protection sticker.
- Remove the sticker by pulling on the sticker's extended tab. You can grab the sticker's tab using a suitable tweezer. Pull the sticker off carefully and slowly.
- **Check voltage and polarity of supply power before usage. Avoid overvoltage and revers polarity.**
- **Do not touch the unprotected sensor surface with fingers or any hard tool to avoid contaminating and damaging (scratches or cracks) the sensor surface.**
- **Never run a camera module without the prescribed heat management in place! This will damage the camera module. Before using a camera module, ask Photonfocus for proper heat management instructions.**

### 3 Product changes or termination

Photonfocus cameras have no fixed lifetime period, we manufacture our cameras for as long as there is demand and if there are available component supplies. In case of discontinuance or non-availability of electronic components, we expend all efforts to find a suitable replacement. We will inform you:

- If any functions of the camera module will differ in its replacement.
- If the camera module dimensions will differ in its replacement.
- That recertification of electromagnetic discharge (ESD) is necessary.
- If no economical replacement is available which causes a termination of the module.

If it is determined that a termination is unavoidable, we will inform you accordingly.

Generally, we send out a cancellation notification 6 months prior.

In cases of a spontaneous component(s) unavailability, we send out the cancellation notification immediately after determining unavailability.

## 4 Repair

In case of damaged or non-working camera modules, please send your repair request to [support@photonfocus.com](mailto:support@photonfocus.com). You will receive an RMA number with an RMA form.

Please fill out the RMA form and send the RMA form and the affected camera(s) to Photonfocus' Headquarter in Switzerland at:

**Photonfocus AG**  
Bahnhofplatz 10  
CH-8853 Lachen SZ

Please note that repairs will have a charged fee under the following situations:

- Warranty expired.
- Camera module is returned in a different PCB stack order than was originally shipped. PCBs are marked and tracked via their serial numbers.
- Camera module was damaged by overheating due to insufficient heat management in your target device.
- Sensor is contaminated with dust, fingerprints or remains of chemicals and must be cleaned.
- Sensor was damaged by tools (scratches or cracks).
- Parts of camera PCBs were damaged by electromagnetic discharge (ESD), overvoltage or reverse polarity.
- Soldering onto any PCB.
- Plugs were broken, due to inappropriate handling.