Additional Information	Product	Lamp module for IFC2421/2422/2451/2461/2471LED
	Article no.	2418011, 2418025, 2418026
	Basic operating instructions: X9751238, X9751367	

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Replacing the LED Lamp Module

NOTICE Never kink optical fibers or bend them in tight radii. Protect the ends of the optical fibers against contamination. Only replace lamp module in a clean environment.
> Damage to or destruction of the optical fiber, failure of measuring device.

Required Tools, Equipment
- Phillips screwdriver, needle nose pliers
- Replacement lamp module
- Fiber optic reflector (available as an optional accessory)

Procedure

➡ Turn off the controller using the main switch (Power On).

➡ Unplug the sensor plug, plug the protective cap into the sensor port.

➡ Have the new LED lamp module on hand, unscrew the protective cap from the LED, place it loosely on top.

➡ Unscrew the 6 screws on the right-hand cover of the controller, hold the cover.

➡ Place the cover next to the controller.

ⓘ If the optical fibers are short, store the cover in an elevated position. The black optical fibers to the LEDs are very thin and extremely sensitive to kinks, any bending tighter than the minimum bending radius due to tensile stress can cause fibers to break.

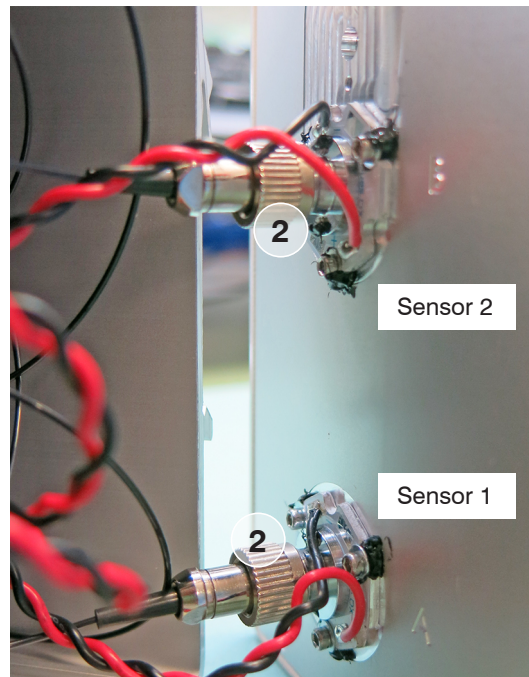➡ Carefully unplug the white supply plug (1) from the circuit board.

Sensor 2

Sensor 1
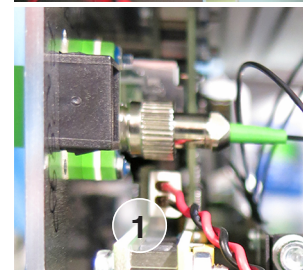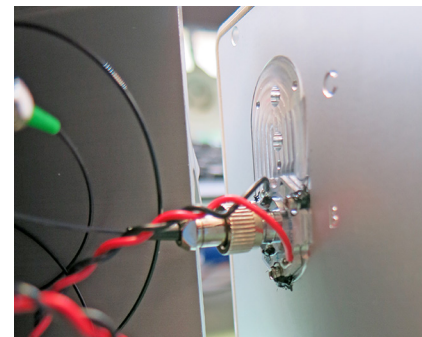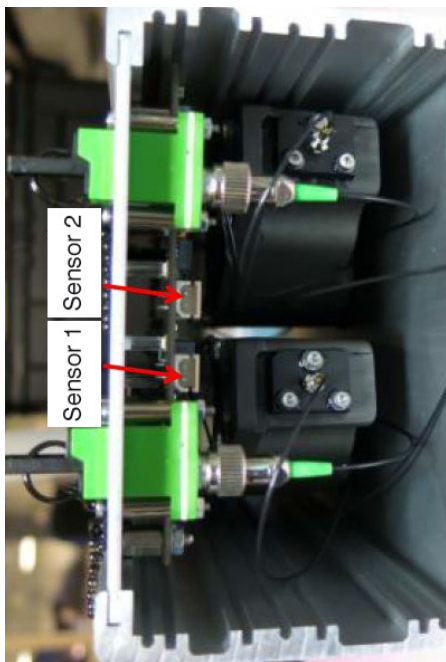
| NOTICE | Never touch or bump the front of the ceramic ferrule (fiber plug) to rule out contaminations of the fiber. This causes loss of light and thus failure of the measuring device. |

➡ Unscrew the metallic fiber plug (2) from the old LED and pull out the fiber plug.

Sensor 2

Sensor 1

➡ Have the new cover module with the light source on hand. Check the fiber connection of the controller for contaminations. If necessary, clean the fiber connection with a lens cloth and alcohol.

➡ Remove the red protective cap from the light source.

➡️ Carefully insert the fiber plug (2) into the new LED module, align the lug in the groove, tighten the fiber plug.
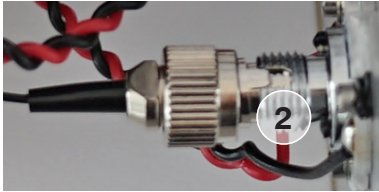
➡️ Replug the white supply plug (1) into the port on the circuit board; using a screwdriver, push the supply plug in until it snaps in.

If the LED is located on the back wall, you proceed in the same way. The old LED remains in the controller. Shorten the electric connection cable.

➡️ Place the new cover again on the housing, lay the optical fiber in such a way that no tight bending radii are created and no cables are pinched.

➡️ Loosely screw in all 6 countersunk screws, then tighten them crosswise to medium tightness.

Initial Operation After Replacing the LED Lamp Module

➡️ Connect the controller via Ethernet to the PC. Turn on the controller and let it warm up for about 30 min.

Perform dark referencing; no sensor is connected to the controller.

IFC2421/2422	IFC2451/2461/2471LED
➡️ Log into the controller with the password IfDCaL.	➡️ Log into the Expert user level on the controller, default password = 000.

➡️ Send the following command to the controller using a terminal program:

IFC2421: darkcorr	IFC2451/2461/2471LED: darkcorr
IFC2422: darkcorr_ch01 / darkcorr_ch02	

The LEDs Intensity and Range on the controller start to flash. The controller now records the current dark signal for about 20 s.

Perform light referencing.

➡️ Connect the fiber optic reflector, available as an optional accessory, to the sensor port.

➡️ Send the following command to the controller using a terminal program:

| IFC2421: `lightcorr` | IFC2451/2461/2471LED: `lightcorr` |
| IFC2422: `lightcorr_ch01` / `lightcorr_ch02` | |

ⓘ There must be no data transmission running while the command is executed. Light referencing can take about 10 s. The result of the referencing is stored.

➡️ Remove the reflector.

Perform dark referencing for all sensors you use.

➡️ Connect the sensor to the warmed-up controller and select it in the controller, see `Settings > Sensor` menu.

➡️ Remove the measured object from the measuring range or cover the sensor front with a piece of dark paper.

ⓘ During dark referencing, there must be no objects within the measuring range nor ambient light reaching the sensor under any circumstances.

➡️ Send the following command to the controller using a terminal program:

| IFC2421: `darkcorr` | IFC2451/2461/2471LED: `darkcorr` |
| IFC2422: `darkcorr_ch01` / `darkcorr_ch02` | |

The LEDs `Intensity` and `Range` on the controller start to flash. The controller now records the current dark signal for about 20 s. Remove the paper cover from the sensor.

IFC2421/2422:	IFC2451/2461/2471LED:
➡️ Log into the `Expert` user level on the controller, default password = `000`.	---

Start measuring.

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