Getting started with the LI-720 and the Carbon Node

Thank you for your purchase of the LI-720 Carbon Flux Sensor. An LI-720 that is connected to an IoE Module is a Carbon Node on LI-COR Cloud. This document introduces the LI-720 and the Carbon Node.

Online resources

Operating Information: Instructions for the LI-720 Carbon Flux Sensor, IoE Module, and LI-COR Cloud are online at licor.com/support.

CarbonWare app: A Windows® OS application for viewing data and calibrating the LI-720. At licor.com/support, search for CarbonWare.

LI-COR Cloud: A Carbon Node is an LI-720 connected to LI-COR Cloud at licor.cloud.

What's what

- **LI-720 Carbon Flux Sensor:** Computes flux of carbon dioxide (CO_2) from high-speed gas concentration and wind speed measurements. Measures PPFD, vertical and horizontal wind speed, air temperature, and relative humidity.

- **Instrument and Guy Adapter:** Accepts the instrument mounting hardware and guy wire clips.

- **Extendable Mast:** A three-part extendable mast for heights up to 5 meters.

- **IoE Module Enclosure:** Houses data processing electronics, antennas, an SD card for local data storage, battery, and the IoE interface.

- **Solar Panel:** 100-watt panel for charging the IoE Module battery (optional).

LI-720 Carbon Flux Sensor

Instrument and guy wire adapter

Extendable Mast

Enclosure

Solar Panel
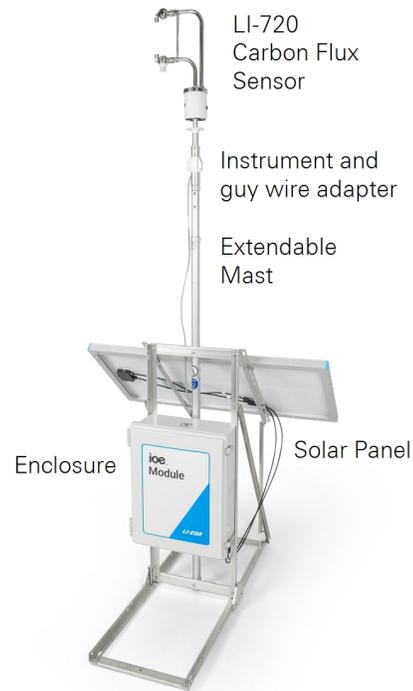
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Precautions and preparations

- Always store and ship the LI-720 in the shipping box with foam. This protects the optics from impacts that may alter the calibration.

- Do not drop the LI-720 or expose the spheres to impacts. Drops and impacts can affect the calibration. Always power off before handling the unit. If the LI-720 is subject to a drop or impact, refer to the instruction manual for guidance.

Configuring the Carbon Node

Follow these steps to get started with the LI-720 and LI-COR Cloud. Read the instructions and online help for more details and safety information.

Step 1: Do the **Initial Performance Check** described in the manual.
Complete the check before going to the field.

Step 2: At the field site, assemble the IoE hardware and connect the cable to the LI-710 and **Sensor** connector on the IoE Module.
⚠ **Important:** Follow the safety instructions in the instruction manual.

Step 3: Power on the IoE module.
Short-press the power button to power on the module. Allow one or two minutes for it to power up.

Step 4: Configure sensors.
From the home screen, press left three times (◀◀◀) to access the **Device Setup** tool. Follow the instructions on the screen to connect and configure the sensors. Dismiss the last prompt and watch as the IoE Module returns to the home screen after configuring sensors.

Step 5: Create an account on LI-COR Cloud.
Go to licor.cloud and follow the steps to create an account. A valid email address is required. Log in after creating an account.

Step 6: Register the IoE Module on LI-COR Cloud.
While logged in to licor.cloud, select **Register Device**. Enter a name for the node, the **Serial Number** and **Reg Key** when prompted (from the IoE Module home screen, press left ◀ and down ▼ to view the information).
Congratulations! You have created a Carbon Node on LI-COR Cloud.

> **Note:** Refer to the operating instructions if you are using the LI-720 with a datalogger instead of LI-COR Cloud.

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