stratus
quick start guide

Your new Stratus is an LED-based plate reader used to measure optical densities in standard plate formats.
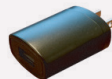

1. stratus

2. USB cable

3. microSD card

4. power adapter

Step 1: Get Started.
Confirm receipt of all components and device (shown above). The microSD card may already be installed in the Stratus. Download the Cerillo Device Manager onto your computer at cerillo.bio/software. Then connect your device to your computer, open the Cerillo Device Manager Software, then open the settings window to set up your device's name and timezone.

Step 2: Location.
Place your Stratus where you'd like to measure. This is anywhere your samples will be happy—incubator, anaerobic chamber, benchtop, hood, etc.

Step 3: Power the Device.
First, insert the microSD card. Then, plug the power adapter into a standard wall outlet, and the USB cable into the power adapter and the Stratus. Alterativly, you can use a computer or battery pack to power your device.

Step 4: Allow for Equilibration.
The Stratus needs 60 minutes to equilibrate to new environmental conditions. This can be a good time to do your experimental prep work.

Step 5: Go!
(See reverse.)

measurements

Insert your experimental plate into the Stratus, then press the start button (left) the status light will briefly illuminate green then cyan to indicate the auto-calibration. The Stratus will automatically begin taking measurements after the calibration. To stop a reading in progress, press the stop (right) button until the status light turns red.

Measurements can be taken with or without a plate lid, or breathable membrane. The Stratus should be at a constant temperature throughout the experiment, avoid large changes especially during the calibration phase. To change the interval of which your measurements are taken, download the Cerillo Device Manager software, select your preferred time, then start and stop a read while the Stratus is plugged into your computer. The Stratus will then recall this custom interval, even when plugged into a wall outlet or battery source.
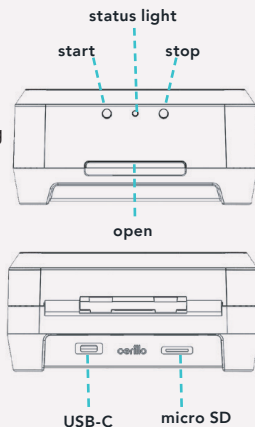
additional details

Collected measurements are automatically stored on the microSD card. You can use any commercially available adapter to access the data from the card. When inserting the card into the Stratus, do so with the Stratus unplugged; otherwise, the card will not be recognized and future data will not be recorded.

Data files are stored in order of when your experiment took place (in "YYYYMMDD" format). Inside each day's folder are data files titled by the time the experiment was started (in "hh-mm-ss" format). These are saved as standard .csv files, and can be opened in any spreadsheet or data analysis software.

Having trouble downloading the software? You may need the install an FTDI driver from www.cerillo.bio/ftdi

status light

start   stop

open

USB-C   micro SD

status light

○ White: Booting

● Green: Read/Reading

● Red: Stop

● Yellow: Between Reads

○ Cyan: Calibrating

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