

# stratus

## frequently asked questions



### **What are the limits to the operating conditions of the Stratus?**

The Stratus can be operated at any temperature from 0°C to 60°C, any relative humidity between 0% and 99%, and any oxygen concentration from 0% to 21%.

### **What kind of plates is the Stratus compatible with?**

The Stratus can read 96-, 24-, 12-, or 6-well plates. Flat-bottomed plates are preferred. The Stratus is also compatible with white and black walled plates. The maximum allowed plate height is 21.5 mm.

### **Will the Stratus work in an anaerobic chamber?**

Yes. The Stratus has been tested extensively in anaerobic environments and is compact enough to fit inside a typical anaerobic chamber's airlock. The one requirement is that there must be a power source in the chamber to power the device, this can be a computer, wall outlet, or battery pack.

### **Can the Stratus reside in an anaerobic chamber permanently?**

We have had numerous beta testers and customers use various experimental versions of the Stratus in anaerobic chambers for long periods of time with no problems. The anaerobic unit in service the longest has been in its chamber for about 3 years (as of August 2019). However, we have not explicitly tested the effects of long-term exposure to an anaerobic environment.

### **Does the Stratus contain any internal controls for temperature, atmospheric conditions, or shaking?**

No. The Stratus is extremely compact and designed to adapt to any measurement environment you establish for it, rather than creating its own. The Stratus has ventilation around the entire device which allows for equilibrated environmental conditions within the Stratus.

### **Can I remove my plate during an experiment?**

We strongly recommend against removing a plate during an experiment or stopping and restarting an experiment. If it is absolutely necessary, the device will continue functioning, but data quality may suffer, requiring the user to delete timepoints that were interfered with.



### **What if my samples require shaking?**

The Stratus can be placed on an orbital or linear shaker during measurement. If you choose to conduct a shaking experiment, we recommend a minimum speed of 180 RPM to ensure good data quality. We also sell a shaking adapter that allows the Stratus to be securely attached to a shaking platform.

### **Are there clinical applications tested for the Stratus?**

We have not validated the Stratus for use in a clinical setting, and therefore require that it be used for research purposes only.

### **Does the Stratus need to be connected to a computer to run?**

No. The Stratus can be fully operated while powered by its included USB AC adapter, without a connection to a computer. The Stratus must be connected for the initial experimental setup, but those parameters are then saved to the onboard microSD card, and it will run those settings anywhere you put it.

### **Does the Stratus support saving data to external storage?**

The Stratus saves all of its data to its onboard microSD card, which can be removed and read in any commercially available adapter. It does not support any other form of external storage, though. You can also read the saved data directly off of the device (via a USB connection), even if it was not tethered to a computer when the experiment was run.

### **Can the Stratus be operated without a microSD card?**

No. The Stratus must have a microSD card inserted to save experimental data and operational parameters. For questions about microSD card compatibility, please contact Cerillo support.

### **Can the Stratus be used with any off-the-shelf USB cord or adapter?**

We highly recommend using the Stratus only with its provided peripherals. We are unable to provide support or warranty coverage for use with third-party components. For questions or replacement parts, please contact Cerillo support.