

How Do You Identify a Cost-Efficient & Sustainable CO₂ Incubator?

Avoid internal parts that require replacement

Check if there are any parts that need to be replaced regularly for proper performance of the device. For example, fan-associated HEPA-filters can easily add up to 1000€//\$1,100 in only five years – a fraction of the expected lifetime of the device.

Look for in-field upgradeable options

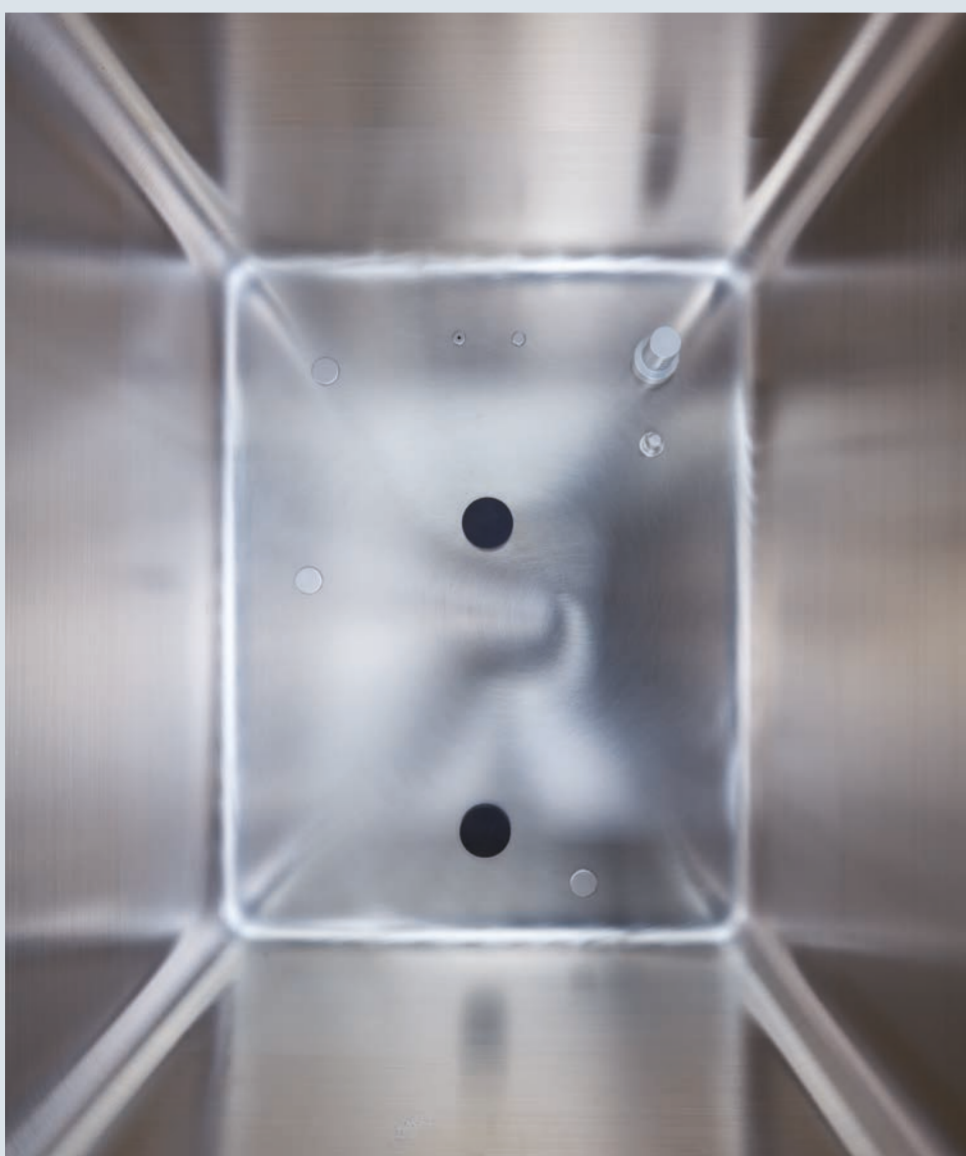
Will your lab setup change in the future? Will documentation of culture conditions or even cultivation under hypoxic conditions be required? If it's even possible, it's better to be prepared. Look for a device with many in-field upgradeable options to adapt flexibly to new requirements (e.g. upgradeable O₂ control for hypoxic experiments, humidity or water level monitoring, or a changeable door hinge position).

What's in your package?

When you compare quotes from different manufacturers, we recommend to check what's in the package. For example, how many shelves are included in your next device? Are you planning to use the upper shelf if the device has a fan? What kind of CO₂ sensor is included: a basic TC-sensor or the more advanced IR-sensor? Can the device be stacked with models of other manufacturers with a universal stacking kit?

Fast and easy cleaning will save you time

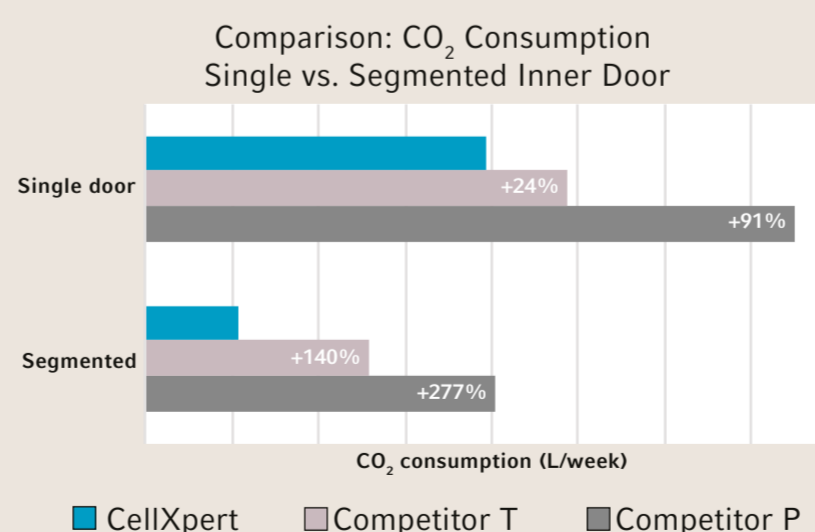
Regular cleaning reduces the risk of losing precious samples and repeating of experiments due to contamination. Check if your new device has only a few internal parts to remove/clean and that it comes with a smooth, seamless chamber where contaminants have nowhere to hide.



Check for low gas consumption

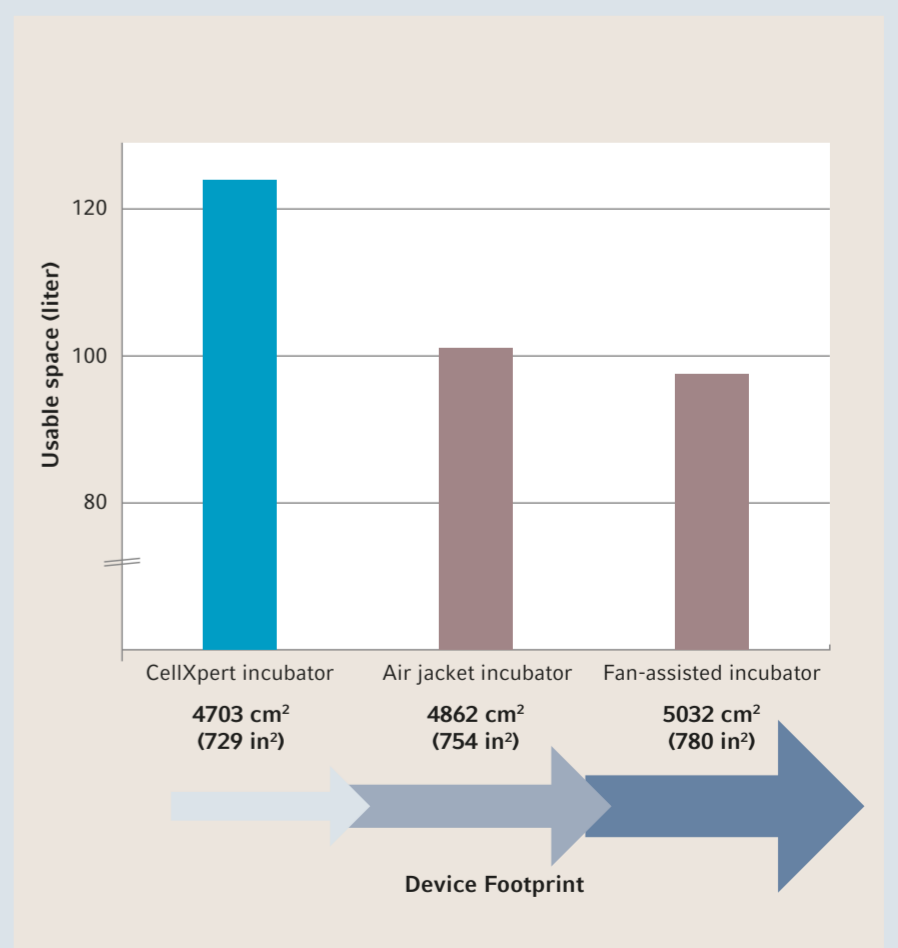
Often underrated, gas consumption (CO₂ and N₂, depending on requirements) can be a significant cost factor and easily exceed the purchase price of a CO₂ incubator over its lifetime. This can be due to the costs of gas itself, but also due to the necessary employment of staff to frequently change gas cylinders. Ask the manufacturer for gas consumption data, calculate the costs over the expected lifetime with your local gas prices, and consider the necessary gas cylinder change frequency and associated labor.

Tip: Also consider segmented inner doors.



Compare vessel capacities

The volume class (e.g. 170 L) does not tell you much about the actual usable space. Generally, CO₂ incubators with a direct heating technology provide the highest ratio of usable volume versus footprint, as they usually only contain a racking system, shelves, and a water tray—no additional internal parts like a fan, air ducts, fan-associated HEPA-filters, and others.



Learn how to save costs with the [CellXpert® CO₂ Incubator](#)

More about CO₂ incubators from Eppendorf www.eppendorf.com/co2-incubators

