Specifications - Full Enclosure Incubator and Hypoxia Mixer

Project:

Full Enclosure Incubator and Hypoxia Mixer
The full enclosure incubator shall be compatible with the Echo Revolution Confocal microscope that the unit currently has. This incubator will enable USDA to perform time-lapses and live-cell imaging with the capability to control temperature, humidity, and CO2 and will improve the capability of Echo Revolution Confocal microscope of the unit. The hypoxia mixer is needed to create low oxygen level in the cell culture to mimic the oxygen level of the tissues. The combination of these two instruments will maintain the pH of cell culture media and bring gas consumption to the minimum.

Technical Requirements:

Requirements for Incubator (Quantity 1 Each)
Temperature Controller: Ambient up to 40°C.
Stage top Humidity chamber
Input for premixed 5% CO2
Full enclosure for the Echo Revolution microscope.
Fully fanless
See-through construction for clear view and simple sample access

Requirements for hypoxia mixer (Quantity 1 Each)
Compatible with the Revolution/Confocal Full Enclosure Incubator
Ability to regulate CO_2 from 0 to 5% and 0 to 20% oxygen.
Ability to connect directly to compressed CO_2 gas and balance gas (eg. N_2) cylinders.

Deliverables

Item Number	Deliverable	Delivery Address	Preferred Delivery Date
0001	Incubator	Attn Delivery: N2002 (Receiving) Microbiome and Metabolism Research Unit USDA-ARS/ACNC 11 Children's Way Little Rock, AR 72202	07/15/2026
0002	Hypoxia Mixer	Attn Delivery: N2002 (Receiving) Microbiome and Metabolism Research Unit USDA-ARS/ACNC 11 Children's Way Little Rock, AR 72202	07/15/2026