



okolab

UNO TOP STAGE INCUBATOR

Temperature, CO₂ and Humidity. Performance made simple.



www.oko-lab.com



CONTROLLER

UNO-T ensures sample temperature with the highest accuracy. It controls up to six integrated channels with a state-of-the-art multichannel controller.

Features:

- Compatible with any Okolab stage top chamber
- Objective heater with smart calibration routines
- On-board memory for data logging
- 4.3" touch screen interface
- Includes an external T-sensor for sample feedback operation
- Integrated in third party software: NIS Elements, LAS X 2.0, ZEN black edition, Metamorph, Micromanager
- TTL compatible version is available



Controller Package Codes:

UNO-T	Temperature only
UNO-T-H-PREMIXED	Temperature, Humidity, Premixed Gas
UNO-T-H-CO2	Temperature, Humidity, Manual 100% CO2 mixer - includes air pump

All packages require the selection of one stage top chamber and are compatible with Okolab objective collars.

UNO-T-H-PREMIXED

UNO-T-H-PREMIXED is a digital temperature and humidity controller with gas flow regulation for Okolab electrically heated stage top chambers.

UNO-T-H-PREMIXED includes UNO-T and a humidity module accepting pre-mixed air/CO₂ gas.

Dry gas is humidified by flowing over warm water. A heated tube delivers the humid gas to the stage top chamber, preventing moisture condensation. A pressure regulator with calibrated output orifice allows the user to set desired gas flow rate by regulating pressure at the inlet of UNO-T-H-PREMIXED with a pressure gauge regulator (included).



UNO-T-H-CO2

UNO-T-H-CO2 is a digital temperature and humidity controller with gas concentration and flow regulation for Okolab electrically heated stage top chambers.

UNO-T-H-CO2 includes UNO-T, a manual gas mixer accepting 100% CO₂ and air, an air pump, and a humidity module.

The manual mixer mixes 100% CO₂ and background air to the desired concentration in the range 0-15% with an accuracy of $\pm 1\%$.

Dry gas is humidified by flowing over warm water. A heated tube delivers the humid gas to the stage top chamber, preventing moisture condensation. Flow rate is regulated through the manual gas mixer.

HUMIDITY MODULE WITH HEATED TUBE

The UNO Stage Top Incubator employs a powerful humidifier approaching 90% relative humidity.

Humidified gas is delivered to the sample through a heated and insulated tube. An algorithm accounting for room temperature variations automatically adjusts the tube's temperature.



INCUBATING CHAMBER

All incubating chambers are made by the following components:

- Chamber main body
- Chamber heated lid with embedded temperature sensors
- Magnetic interchangeable inserts with magnetic sample fixing tools
- Removable chamber riser to reduce the height of the chamber
- Perfusion holes for inlet and outlet of tubes
- Optional lids available



OBJECTIVE COLLARS

OBJ-COLLAR series consists of flexible heated collars to counteract the heat sink caused by the objective.

Automatic calibration routine is available to precisely compensate heat sink due to contact with immersion and dipping objectives.

UNO STAGE TOP INCUBATOR Technical specifications:

Temperature range	3°C above ambient temperature (minimum temperature set point 25°C) to 60°C
Temperature accuracy	± 0.1°C in sample feedback mode ± 0.3°C in chamber feedback mode, if room temperature remains within ± 1°C
Manual Gas Mixer resolution	1 %
Air Pump, outlet pressure	0.3 atm
Humidity efficiency	c.a. 85 %
Controller dimensions	129mmx125mmx104mm



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