

# incuART™ Series Benchtop Incubators



*Customized technology for the best IVF success rate!*

incuART A TRIGAS CELL CULTURE INCUBATOR... THE WORKHORSE OF THE CELL BIOLOGY LAB...



**Usability - Designed for your Convenience**



The incuART™ incorporates separated chambers. Your cell cultures are safe and sound, regardless of door openings.

In addition, a sensor detects your door openings securing the environment for the other chambers.

# Serviceability & Usability

*A time-tested technology to provide a quick recovery*

## Convenience

End user replaceable O<sub>2</sub> sensor, VOC/HEPA filter and the UV light without having to call in a technician.\*\*\*

Built in online support. All important functions are being monitored, logged and can be accessed through internet.

## Reliability

Our incubator gives precise readings of gas, pH and temperature levels without the need of frequent calibrations.

In standard incubators Sensor calibration is required each time you change any of the settings; weekly calibration is typical.

## Recovery

Your gas recovers in less than three minutes after a 15 second door opening.  
The temperature is not affected!

In standard incubators the gas concentration cannot recover until both temperature and humidity stabilize.

## Accuracy

The CO<sub>2</sub> sensor is not affected by temperature or humidity; it solely reads CO<sub>2</sub> levels.

Usually, temperature and humidity influence the CO<sub>2</sub>, O<sub>2</sub> readings in standard incubators; by monitoring the thermal and humidity interaction in the gas circuit, the incuART™ can maintain a stable gas concentration.

# Specifications & Options

Model	incuART S	incuART pH1
<b>Temperature Features</b>		
Temperature Control Range	ambient to 40°C	
Individual Temperature Control	0.1°C steps	
Temperature Uniformity	±0.1°C @ 37°C and @ 25°C ambient temperature	
Temperature Sensors	6x PT1000	
<b>pH features</b>		
pH Range	N/A	pH 6 to 8
pH Availability	N/A	chamber 6**
pH measurement accuracy		0.05 pH units ( pH 7.00 to 7.60)
pH resolution		0.01 pH units
<b>Gas mixing features</b>		
CO <sub>2</sub> range	0-20% CO <sub>2</sub>	
CO <sub>2</sub> control resolution	±0.1% CO <sub>2</sub>	
CO <sub>2</sub> sensor type	Dual channel Infrared CO <sub>2</sub> Sensor	
CO <sub>2</sub> consumption	< 2 l /hour	
O <sub>2</sub> range	1-21% O <sub>2</sub>	
O <sub>2</sub> control resolution	±0.1% O <sub>2</sub>	
O <sub>2</sub> sensor type	Fuel Cell – Medical Certified	
N <sub>2</sub> consumption	< 12 l/hour	
# of gas Inputs	Gas inputs - 100 % CO <sub>2</sub> , 100 % N <sub>2</sub> , premixed	
<b>External logging &amp; alarms</b>		
Web Interface	requires static IP address only & VPN access - Android App available	
SMS Alarm	Yes	Yes
E-mail alarm	Yes	Yes
Automatic relay alarm	Yes	Yes
Touch Screen Display	8.9"	
Barcode scanner ID	N/A	On request
Exterior Dimensions	22.8" W x 22.8" D x 9.4" H (580 mm x 580 mm x 240 mm)	
Exterior Cabinet Construction	Powder Coated Aluminum	
# of Chambers	6 standard	
External PT1000 sensors	6 ports available for external monitoring	
External gas monitoring system	1 valve controlled port available	
Chamber Dimensions	6.2" x 3.9" (16 cm x 10 cm) - Falcon & Nunc compatible	
Electrical	110 – 230 VAC 50/60 Hz 3.5A	
Power Consumption	<220W @ Full Consumption @ 37° C	
Shipping Weight	77 lbs. (35 kg.)	

**Note!**

Specifications are subject to change without notice!

All sensor data are measured @ sea level and normal average atmospheric pressure.

## Certification

Safety class A

2004/108/EC Electromagnetic compliant

2006/95/EC Low voltage compliant

EN 61010 revision 3 Conforms

RoHS Compliant

### Optional Accessories:\*

- Temperature calibration kit
- Gas calibration kit
- VOC/HEPA inline filter
- 2 Unit Trolley

\*on request



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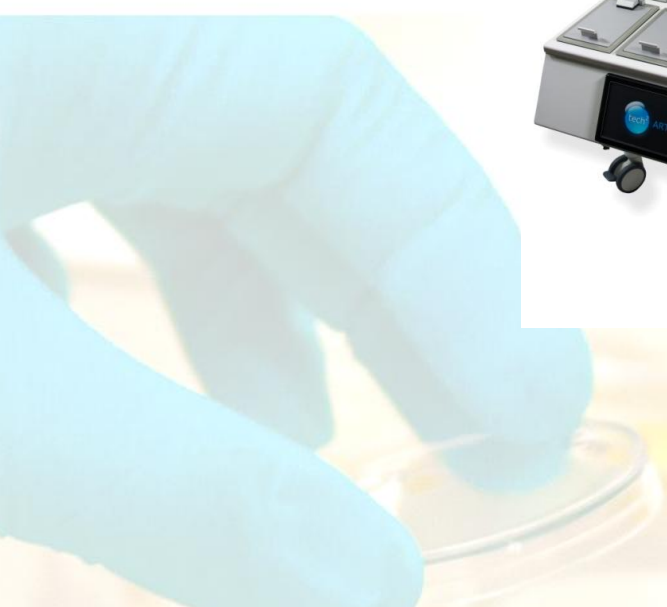
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### 2 unit incuART Trolley





# incuART Unique Advantages

## 1. incuART™ incorporates separated chambers

- First ever IVF bench top incubator that was designed and manufactured in Denmark with real separated chambers including individual temperature control and monitoring for each chamber.
- No cross over heat.
- Very low contamination risk as each chamber can be accessed separately.

## 2. Unique Gas Mixing system

- Tri gas incubator.
- Low gas consumption
  - $N_2 < 12$  l/hour
  - $CO_2 < 2$  l/hour
- Quick recovery time < 3 minutes.
- High gas mixing volume enabling gas sampling during usage for QA/QC without affecting the cell culture.
- Timer on gas sampling port.
- Independent and monitored gas mixing chamber. The gas mixture is done inside the mixing chamber.

## 3. Aseptic Control System

- In line, built in, easy accessible VOC/HEPA filter and UV lamp.

## 4. The best temperature stability

- Temperature accuracy  $\pm 0.1^\circ C$  @  $37^\circ C$  and @  $25^\circ C$  ambient temperature.
- Platinum sensor technology.
- Best in class for pH accuracy.
- Lid openings will not cause any temperature fluctuations.\*
- Due to its unique design, the temperature in each chamber can be set to a different Set Point within the range \* with no impact from the surrounding chambers.

## 5. pH Monitoring System

- Monitoring the pH value in one reference chamber in a non invasive reference pH cup.
- No pH sensor cleaning required. Only sterile pH sensors are being used.
- Quick calibration can be done each time a culture cycle starts.
- Online monitoring & logging.
- 6pH and 10pH chamber available

## 6. incuART™ incorporates lid movement detectors

- A sensor detects the door openings securing the environment for the other chambers by shutting off the gas return circuit thus preventing contaminated air to enter into the other chambers.
- The lid opening will be logged by a time stamp.
- The lid opening period will be recorded.
- An alarm will be triggered if the lid is open for more than 10 seconds.

## 7. User & Web Interface

- User friendly 9" touch display.
- Graphical output display for each function.
- Possible to connect the incuART to internet for monitoring ,control.
- Output data export to printer or CSV file for further research.
- Possible to perform online troubleshooting from any location through internet.
- Can log to USB.

## 8. Aseptic Control System

- VOC/HEPA filters electronic monitoring system. Preset counter that triggers an alarm when due for replacement.
- UV lamp electronic monitoring system. Preset counter that triggers an alarm when due for replacement.
- UV lamp failure alarm.
- Gas return circuit automatic shut off at lid opening

## 9. Usability & Serviceability

- Modular & built for service friendliness.
- Possible to troubleshoot online.
- User and cell culture friendly. No time consuming access to consumable parts such as O<sub>2</sub> sensor, CO<sub>2</sub> sensor, and UV lamp.
- All functions, Set Points and output levels are monitored and logged.
- User friendly alarms and errors. No numbered error codes.

\* Temperature range: from ambient to 39° C.

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Patented technology™

IncuART™ - benchtop incubator  
now with built-in pH sensor  
discovery through innovation



IncuART™

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