

ORIGIO / PLANER benchtop incubator BT37

Unrivalled temperature, gas and humidity control

New!
Optional fitted
pH monitoring



Designed to maintain consistent culturing environments for optimum temperature and pH control

- Rapid recovery to OPTIMAL environment
- Network connectivity for data output
- Base plate of chamber matched to common IVF dishes
- Integrated battery backup
- Reduced oxygen culture capability
- The BT37 works with any defined premixed gas of choice - to achieve the proper CO₂ and reduced O₂ environment.

Temperature

- The most accurate temperature controlled incubator currently available
- Control accuracy to 0.1c
- Utilizing tightly packed, full surface heating elements
- 7 temperature controllers ensure accuracy and control over entire chamber
- Cooling fans to control internal temperature and humidity system

Gas control

- Delivering exact gas specification
- Dedicated non diffusing tubes
- Unique pulse, bleed and purge flow
- Rapid recovery after lid opening
- Low gas usage

Humidity

- Heated gas tubes ensure gas is delivered at exact temperature
- Tube guides prevent tube blocking
- Airflow system prevents condensation
- Unique visual gas flow system
- Unique visual water level system

**ORIGIO / PLANER BT37
vs. standard large incubators**

- Small volume chamber for culture = Far greater control and accuracy of pH, temperature, and humidity.
- Heated base and lid provides a very stable environment.
- Faster recovery of all parameters after lid opening
- Patient-specific chambers
- Compact, space-efficient

Control is everything!

Fast temperature drop and slow recovery inside large incubator after opening of incubator door. The mini incubator chamber allows stable, constant temperature.

**ORIGIO / PLANER BT37
vs. other commercial mini incubators**

- Unrivalled temperature & humidity control using tightly packed, full-surface heating elements combined with dual cooling fans.
- Holds the largest range of culture dishes
- Clear, unambiguous status indicators visible from across the lab.
- Password protected – no accidental changes
- Built-in battery backup for up to 2 hrs
- Water level & gas flow visual indicator
- Ethernet access port
- Independent PRT ports for lid and base unit
- Advanced alarm system

Unrivalled accuracy

Temperature control is kept stable within +/- 0.1c at dish area. This, coupled with heated upper plates and humidification system, provides unrivalled temperature accuracy within sample dishes.



Secure gas flow

- Tube guides reduce risk of "kinking" (bent tubes)
- Heated tube guides reduce risk of condensation in tubes
- Correct gas temperature
- Prevents condensation

Gas connectors

- std. SWAGELOK connectors
- can be connected in series

Remote monitoring

- 10 Base T Ethernet (RJ 45)
- Modbus - TCP/IP protocol
- External alarm contact

Full-contact heating plates

- Exceptional heat distribution
- Accepts largest selection of culture dishes
- Absolute temperature control to 0.1c
- 7 point control

6 monitoring ports
For external probes / calibration

Dual cooling fans

- Remove excess heat
- Quick response to temperature changes
- Internal temperature control
- Prevents condensation

Status indicators
Clearly visible from across the lab

Password protection
No accidental or unauthorized modification of operating parameters (no accidental "switch-off")

"Bubble check" gas flow system
Gas flow clearly visible from across the lab

Battery backup
Built-in backup for up to 2 hours

Homeostasis is imperative

The ORIGIO/ PLANER benchtop incubator BT37 is primarily designed to grow and maintain cell cultures, particularly for IVF applications. The incubator will keep cells at an optimal temperature, humidity and gas content by maintaining a constant and clean environment for the embryo. The BT37 works with any defined premixed gas of choice - to achieve the proper CO₂ and reduced O₂ environment." Incubators are temporary homes for embryos and must replicate the conditions within the human body thus reducing embryonic stress from temperature, humidity or pH change. Accuracy and control of the chamber to obtain environmental homeostasis is imperative. The BT37 benchtop incubator is very accurate, ensuring the embryo suffers little or no exposure to temperature or pH level changes. The compact size allows placement anywhere in the lab including flow cabinets and chambers and separation of patient by chamber increasing security. Flow control is unique with a continuous, pulse and bleed options all available to optimize culture conditions and reduce gas usage.

About Planer
Planer was formed in 1973, and have since been pioneers in development of scientific technology. In IVF, they are renowned for their specialized products for controlled rate freezing. With decades of experience in precise temperature control and top-quality engineering, they have the best foundation for developing the best, most stable environment available for gamete and embryo culture. Planer is also the holder of several awards in technology and innovation. ORIGIO is the exclusive worldwide distributor of the BT37 incubator for IVF.

System specifications

Physical

Dimensions	420 mm wide x 270 mm deep x 210 mm high
Weight	15.5 kg
Storage temperature	-10 °C to +50 °C
Storage humidity	5% to 95% relative humidity non-condensing
Operating environment	For indoor use only
Operating temperature	+5 °C to +40 °C for safe operation. See also temperature control range restriction.
Operating humidity	5% to 90% relative humidity non-condensing
Altitude	up to 2000 m
Pollution degree	Pollution degree 2 (BS EN61010-1)

Control

Temperature control range	(ambient + 5 °C) to 40 °C.
Temperature measurement accuracy	± 0.2 °C
Temperature control accuracy	± 0.1 °C measured after any transient effects due to set-point changes have subsided.
Flow control range	0 ml/minute to 900 ml/minute. Flow measurements are normalised to 0 C , 50% RH and 1 bar.
Flow accuracy	The greater of ± 10% or ± 0.3 ml/minute
Flow control accuracy	The greater of ± 5% or ± 0.2 ml/minute measured after any transient effects due to set-point changes have subsided.

Capacity

Dishes per chamber	4 x NUNC 4 well dishes 4 x NUNC 60 mm dishes 10 x NUNC 30 mm dishes 4 x MINITUB 5 well dishes 4 x FALCON 60 mm dishes 4 x FALCON 60mm single - well "organ culture" dishes
--------------------	---

Power

Power requirements includes Controller	100 - 230 V~ / 50/60Hz / 1.1 A
Internal battery backup	Gelled sealed lead acid battery / 12 v x 12 Ah

Gas supply

Gas supply	Premixed gas. Typically 6% CO ₂ , 5% O ₂ , balance N ₂
Supply pressure	1.5 ± 0.15 bar
Connectors	SWAGELOK 1/4" tube fitting

Alarms

Alarms	The incubator provides 3 volt-free terminals which provide normally-open and normally-closed contacts.
--------	--

Remote monitoring

LAN	10 Base T Ethernet - RJ45 shielded. Modbus-TCP-IP protocol.
Remote PT100 sensors	Remote PT100 sensors PT100 Class A to EN60751. In order to fit the monitoring ports the sensor must meet the following specification: Maximum diameter 2.51 mm. Minimum length 100 mm. Sensing region should be within 15 mm of the tip.

Catalog numbers

BT37
FI 101267
AM 101532

Description

ORIGIO/PLANER Benchtop Incubator BT37
Replacement filter BT37
Replacement humidity bottle and tubing assembly for BT37