MULTIROOM-4D Four Chamber Benchtop incubator - Dry culture

Product Details

Product Number	PRO4216

Technical Specification:

OVERVIEW
The IVF MULTIROOM-4D Multiroom Benchtop Incubator is designed to provide optimal stability and security for the culture of gametes and embryos in modern IVF laboratories. Instead of a single large chamber, it uses a multiroom concept: a main unit with four independently controlled chambers and a matching extra incubator. Each chamber offers a dedicated micro-environment, reducing door-opening events and improving recovery after access.
This dry culture incubator maintains tightly controlled temperature, CO□ and O□ levels without a large humidified inner chamber. The compact benchtop footprint allows placement close to the workstation, shortening the time embryos spend outside incubator conditions. Silent operation and low gas consumption make it suitable both as a main culture system and as a high-performance satellite incubator.
Beyond environmental control, the system introduces intelligent sample and user management. RFID-based identification, compartment-specific e-ink displays and integrated monitoring options support traceable, patient-focused IVF workflows and help embryologists standardise daily routines.

COLO.SCIENCE KNOWLEDGE
Best practices in IVF benchtop incubator culture
Learn how multiroom benchtop incubators support stable culture conditions, patient-specific workflows and reduced exposure times in IVF laboratories.

Read on COLO.Science →

TYPICAL APPLICATIONS

- Culture of oocytes, fertilised oocytes and embryos in IVF and ICSI laboratories
- Patient-specific “one chamber per patient” embryo culture to minimise cross-opening events

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- Short- and long-term embryo culture using dry benchtop incubation close to the IVF workstation
- Backup or satellite incubator for high-risk or time-critical IVF cases
- Research on embryo development, culture media optimisation and gas mixture strategies
- Training and validation of IVF laboratory workflows with traceable sample tracking

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MODELS & DIMENSIONS

Model	Chambers	External dimensions (W × D × H)	Typical dish capacity
MULTIROOM-4D main unit	4 independent chambers	450 × 600 × 210 mm	Per chamber: 4 × Nunc 30 mm dishes, 2 × Falcon® 60 mm dishes, 2 × Nunc® 4-well dishes
Extra incubator unit	According to sub-unit configuration	310 × 550 × 210 mm	Additional capacity for the same dish formats

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TECHNICAL SPECIFICATIONS

Model	MULTIROOM-4D
Power supply	AC 220 V, 50 Hz
Ambient temperature	18–30 °C
Gas supply pressure	1 bar
Temperature control range	25–42 °C
Temperature control accuracy / uniformity	±0.1 °C / ±0.1 °C
CO□ control range / accuracy	2–10 % / ±0.1 %
O□ control range / accuracy	2–20 % / ±0.1 %
Gas consumption (main unit only)	Approx. 2 L/h (N□); 0.5 L/h (CO□)
Number of chambers (main unit)	4
Typical dishes per chamber	4 × Nunc 30 mm Petri dishes; 2 × Falcon® 60 mm Petri dishes; 2 × Nunc® 4-well Petri dishes

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STANDARD DELIVERY & ACCESSORIES

- MULTIROOM-4D main unit with 4 culture chambers
- Power cable and basic installation kit
- Gas connection tubing and basic fittings (N□ / CO□)
- Starter set of chamber inserts for Nunc / Falcon Petri dishes and 4-well dishes
- User manual and quick start guide for IVF laboratory staff
- Optional: extra incubator sub-unit for extended capacity
- Optional: gas filters and additional regulators
- Optional: validation and IQ/OQ documentation package

Exact contents as per current catalog and order confirmation.

MAIN FUNCTIONAL FEATURES

- Intelligent management & access control – warehouse locking design and operator RFID tag identification enable user-level operation control for each chamber.
- RFID tracking per chamber – each chamber supports RFID identification of patient dishes to provide traceable data for samples entering and leaving the incubator.
- E-ink compartment display – every chamber lid includes an e-ink display showing patient/sample information and current temperature, eliminating handwritten sticky notes and reducing the risk of mislabelling.
- Full-function chamber option – one chamber in the main unit can be configured as a full-function warehouse with droplet temperature monitoring and pH value monitoring (optional), supporting in-depth IVF culture optimisation.
- Quiet, benchtop design – low-noise operation and compact footprint support installation close to ICSI and embryo handling workstations, reducing exposure time outside incubator conditions.

Accessories: