

# MIRI® M

## Multiroom Incubator for IVF

This equipment is a CE-marked device and is in conformity with the essential requirements of the medical devices EU regulation 2017/745.

**ESCO**  
MEDICAL



# **A Revolution in Prolonged Undisturbed Incubation**

From the Incubator to the Workstation –  
Stable Environment for the Best Outcome



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# MIRI<sup>®</sup> M

Introducing an extraordinary breakthrough in the world of IVF solutions – a revolution in benchtop incubation.





The Esco Medical MIRI® M multiroom IVF incubator is a modular system consisting of a docking station and movable chambers. The incubator can have up to 18 chambers, each being movable between the MIRI® M docking station. The multiroom IVF incubator features a recirculating gas system where gas is continuously cleaned via VOC/HEPA filter and UVC light. Movable chambers keep your samples safe in a stable gas and regulated temperature environment. The display depicts the patient's name being held in that chamber and allows for visual confirmation. Built-in software takes care of the digital verification.

## FEATURES:

### Moveable Chambers

Ensures the stable temperature environment inside the chamber even when undocked for up to 30 min.

### Built-In Digital Traceability

The dish's movements are continuously tracked, allowing it to be placed in the docking station at any time and anywhere with all actions precisely recorded to ensure no mix-ups and easier organization.

### Improved Multiroom System

A modular multiroom incubation system provides incubation independence for separate chambers, and an improved gas system offers great parameter stability and recovery within.

- Superior gas recovery (< 3 min for CO<sub>2</sub>, < 5 min for O<sub>2</sub>) after docking the chamber
- Temperature recovery (< 1 min) after opening the lid for less than 30 seconds
- Temperature stability:  $\pm 0.1^{\circ}\text{C}$  within the setpoint
- Gas stability:  $\pm 0.2\%$  within the setpoint

### Ergonomic Design

Created with users in mind, the MIRI® M multiroom IVF incubator features specially designed grip points on the sides of the chamber for enhanced stability when carrying.

### Advanced Alarm System

MIRI® M multiroom incubator provides information about alarm conditions through expansive pop-ups, icons and colors on the Docking Station's and Chambers' screens, as well as, backlights in the back panel.

### Practical User Interface

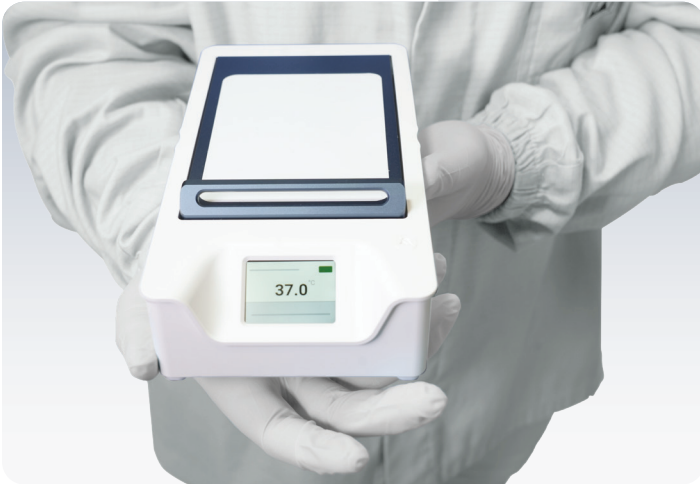
Integrated software allows for easy observation and adjustment of incubation parameters through convenient menus on the incubator's touch-screen interface.

# Prolonged Undisturbed Incubation



Designed for ultimate mobility, MIRI® M Chambers allow embryos to stay in their optimal environment for extended periods - ensuring stability, minimizing disturbance and maintaining consistent incubation conditions. Unlike conventional incubators, which require samples to be relocated and risk environmental fluctuations, our innovative solution maintains stability and integrity right where you need it.

## Improved Sample Transportation



Engineered with an improved, state-of-the-art transportation system, MIRI® M Chambers provide users with a larger, more ergonomic surface to hold onto, significantly enhancing grip and control during manual carrying.

Say goodbye to the risks of unstable handling and hello to a safer, more reliable way to transport embryos with confidence.

## Maximized Capacity

The MIRI® M Docking Station holds up to 18 incubation chambers, giving you the capacity to manage multiple patient's samples at ease.

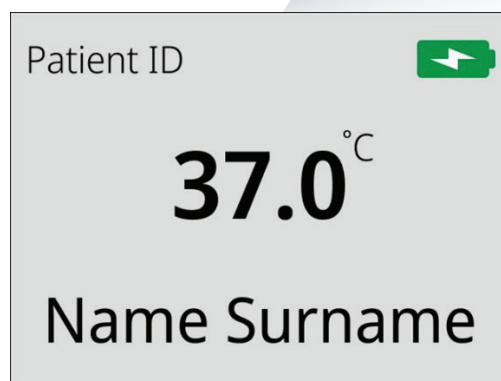
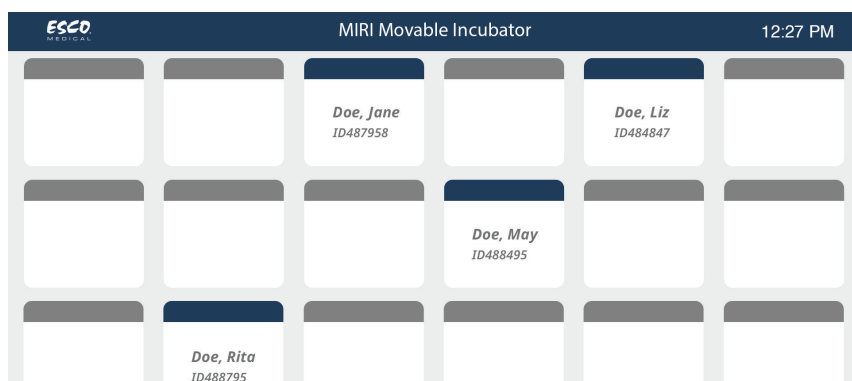
Need to replace a chamber quickly to maintain full capacity? Spare MIRI® M Chamber can be ordered and kept on hand. In case of oil spillage, simply set aside the affected chamber for cleaning and swap in a spare one, ensuring uninterrupted workflow and continuous operation.



## Built-in Mix-up Prevention

MIRI® M Chambers are equipped with a graphical display that prominently showcases patient information, ensuring seamless identification and traceability throughout the entire treatment process.

With this innovative feature, you can trust that each chamber remains assigned to the correct patient, minimizing errors and enhancing workflow efficiency. Designed for precision and peace of mind, our chamber sets a new standard in secure and reliable sample management.



## User Friendly Interface

Designed for effortless interaction, MIRI® M multiroom incubators offer intuitive colors, clear icons, and both visual and auditory feedback, making navigation simple and efficient for every user.

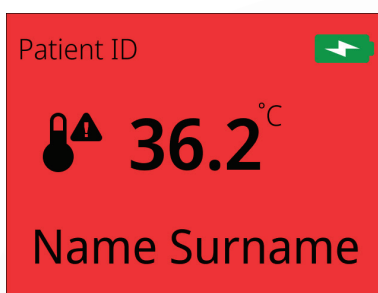
No more guesswork – our smart interface ensures quick recognition of statuses and actions, reducing the learning curve and enhancing productivity. Whether in a fast-paced lab environment or a clinical setting, this intuitive design guarantees smooth, stress-free operation, allowing you to focus on what matters most.



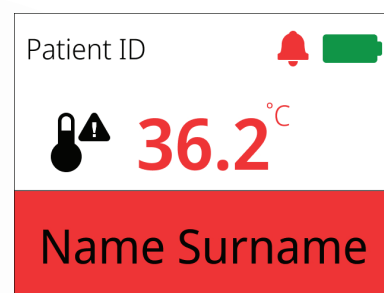
Blue LED light indicating the chamber is docked with treatment



Red LED light indicating an anomaly inside the chamber

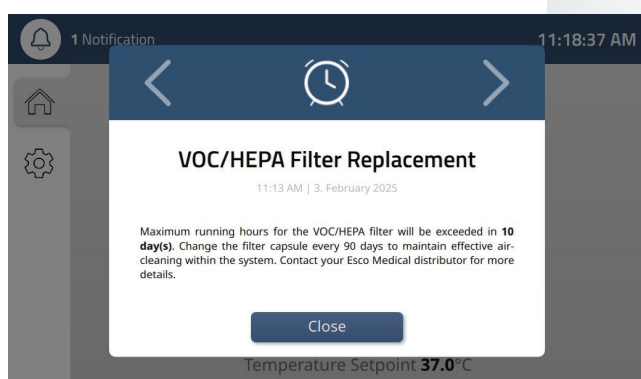


Chamber temperature alarm screen when chamber is docked



Chamber temperature alarm screen when chamber is undocked

## Gas Safety Assurance

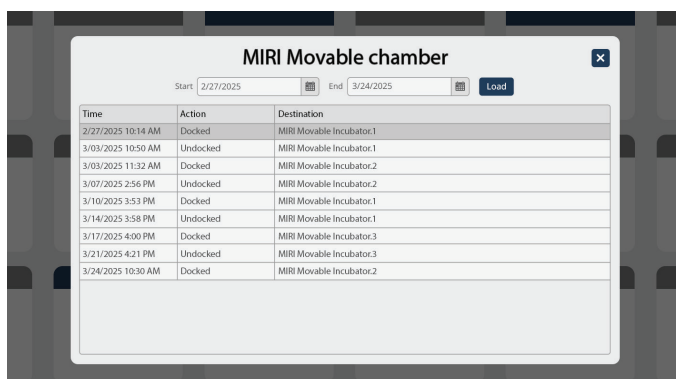


The MIRI® M multiroom IVF incubator features a conveniently accessible VOC/HEPA filter that ensures incoming gas is clean. A dedicated UV light module actively sterilizes the recirculated gas, enhancing the overall quality and safety of the samples.

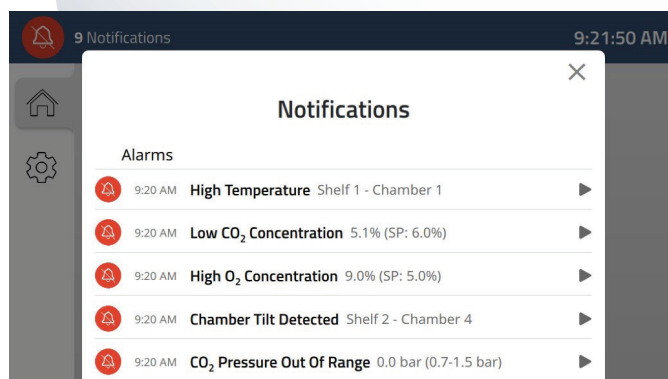
Conveniently designed VOC/HEPA filter mounting points allow users to change the filter with one hand, even in tight spaces.

## Extended QA Functionality

MIRI<sup>®</sup> M Chambers automatically leave a digital footprint every time it is docked in any MIRI<sup>®</sup> M Docking Station, providing real-time tracking without the hassle of paperwork or manual documentation.



Time	Action	Destination
2/27/2025 10:14 AM	Docked	MIRI Movable Incubator1
3/03/2025 10:50 AM	Undocked	MIRI Movable Incubator1
3/03/2025 11:32 AM	Docked	MIRI Movable Incubator2
3/07/2025 2:56 PM	Undocked	MIRI Movable Incubator2
3/10/2025 3:53 PM	Docked	MIRI Movable Incubator1
3/14/2025 3:58 PM	Undocked	MIRI Movable Incubator1
3/17/2025 4:00 PM	Docked	MIRI Movable Incubator3
3/21/2025 4:21 PM	Undocked	MIRI Movable Incubator3
3/24/2025 10:30 AM	Docked	MIRI Movable Incubator2

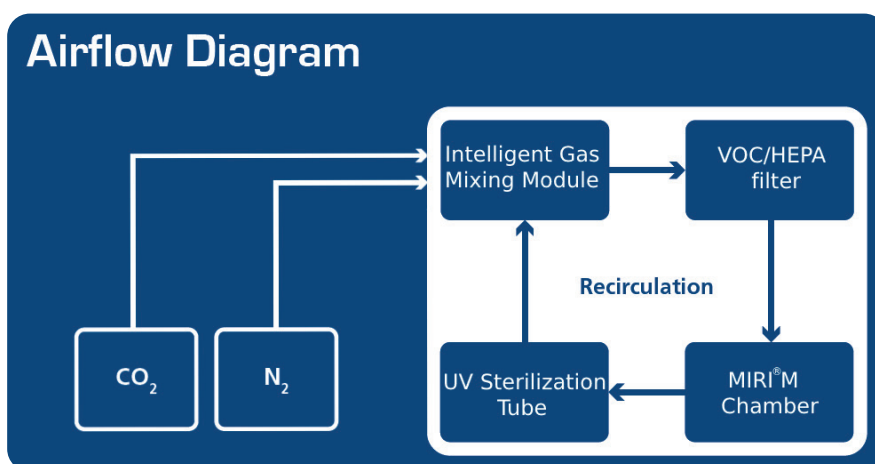


Alarms	
9:20 AM	High Temperature Shelf 1 - Chamber 1
9:20 AM	Low CO <sub>2</sub> Concentration 5.1% (SP: 6.0%)
9:20 AM	High O <sub>2</sub> Concentration 9.0% (SP: 5.0%)
9:20 AM	Chamber Tilt Detected Shelf 2 - Chamber 4
9:20 AM	CO <sub>2</sub> Pressure Out Of Range 0.0 bar (0.7-1.5 bar)

## Improved Gas System

MIRI<sup>®</sup> M multiroom incubators ensure rapid gas and temperature recovery times with no overshoot, maintaining optimal conditions for every sample.

Using 100% CO<sub>2</sub> and N<sub>2</sub> gasses, the intelligent gas system design automatically adapts to the number of connected chambers, seamlessly adjusting gas control without disrupting the gas flow in the remaining docked chambers. This means consistent, reliable performance - no matter the workload.

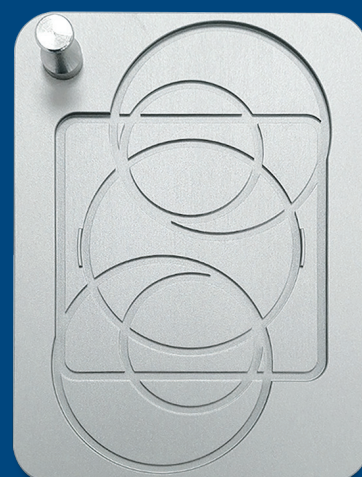


## Just a fitting solution.

MIRI<sup>®</sup> M comes with specialized plate options with optimized heating to match the type of dishes used in the laboratories.

### Heating Optimization Plates

Each chamber includes a plate that ensures efficient heat transfer directly to the culture dishes. Multiple plate options are available to accommodate different dish sizes.





# General Specifications

## MIRI® M Multiroom IVF Incubator

Technical Specifications		MIRI® M Docking Station
Overall Dimensions (W x D x H)		806 × 670 × 643 mm (31.7 x 26.4 x 25.3")
Weight		85.6 kg (188.7 lbs)
Material		Mild steel / Aluminium / PET / Stainless steel
Power Supply		115-230VAC, 50/60Hz, 1.2kW
Temperature Range		35.0 – 39.0 °C
Temperature Deviation from The Setpoint		± 0.1 °C
CO <sub>2</sub> Gas Consumption*	6 Chambers Docked	< 0.3 litre/hour
	18 Chambers Docked	< 0.5 litre/hour
N <sub>2</sub> Gas Consumption**	6 Chambers Docked	< 3.0 litres/hour
	18 Chambers Docked	< 5.0 litres/hour
CO <sub>2</sub> Control Range		3.0 - 12.0%
O <sub>2</sub> Control Range		3.0 - 10.0%
CO <sub>2</sub> and O <sub>2</sub> Concentration Deviation from the Setpoint		± 0.2%
Input Gas Pressure (CO <sub>2</sub> )		0.7 – 1.5 bar (10.15 – 21.76 PSI)
Input Gas Pressure (N <sub>2</sub> )		0.7 – 1.5 bar (10.15 – 21.76 PSI)
Operating Altitude		Up to 2000 meters (6560 feet or 80kPa – 106kPa)
Shipping Weight		122.3 kg (269.6 lbs) (including the pallet's weight)
Shipping Dimension		920 x 800 x 850 mm (36.2 x 31.5 x 33.5") (device on the pallet)

\* Under normal condition (CO<sub>2</sub> setpoint reached at 6.0%, all lids closed).

\*\* Under normal condition (O<sub>2</sub> setpoint reached at 5.0%, all lids closed).

Technical Specifications	MIRI® M Chamber
Overall Dimensions (W x D x H)	113 x 215 x 59 mm (4.5 x 8.5 x 2.3")
Weight	1.03 kg (2.27 lbs)
Material	Aluminium / PET / Stainless steel
Power Input	24V DC, 1.58A, 38W
Battery	3.6V, 12.42 Wh, Li-Ion
Undocked Chamber Battery Time	30 minutes (without the lid opening)
Shipping Weight	1.3 kg (2.9 lbs)
Shipping Dimensions	122 x 324 x 163 mm (4.8 x 12.8 x 6.4") (when sent separate)



# Ordering Information

MIRI® M Multiroom Incubator		
Item Code	Model Code	Description
2073020	MRI-M-DS18C-8/9	MIRI® M Multiroom IVF Incubator (Docking Station + 18 Chambers)

Accessories		
Item Code	Model Code	Description
1320552	MRI-M-VOC	MIRI® M VOC/HEPA Filter
1320553	MRI-M-FD	MIRI® M Heating Optimization Plate for Falcon® dishes
1320554	MRI-M-ND	MIRI® M Heating Optimization Plate for Nunc™ dishes
1320555	MRI-M-BD	MIRI® M Heating Optimization Plate for BIRR dishes
1320556	MRI-M-PD	MIRI® M Heating Optimization Plate without footprint for Plain dishes









# ESCO LIFESCIENCES GROUP



## Esco Medical Products:

MIRI® M Multiroom Incubator  
MIRI® Multiroom Incubator  
MIRI® Humidity Multiroom Incubator  
MIRI® II-12 Multiroom Incubator  
Mini MIRI® Dry Multiroom Incubator

Mini MIRI® Humidity Multiroom Incubator  
MIRI® TL6 Time-Lapse Incubator  
MIRI® TL12 Time-Lapse Incubator  
Multi-Zone ART Workstation  
MIRI® Laminar Flow Cabinet

MIRI® Evidence RFID Witnessing & Traceability System  
CelCulture® CO<sub>2</sub> Incubator  
MIRI® GA (Gas and Temperature Validation Unit)  
MIRI® AVT  
CultureCoin®

*Infertility is a problem that has a significant social, psychological, and economic impact on afflicted individuals and couples. It is a global concern that knows no race or creed. It has been estimated that 1 in 6 couples struggle with infertility at least once in their lifetime.*

*Esco Medical is one of the divisions of the Esco Lifesciences Group. We provide innovative technological solutions for fertility clinics and laboratories. We aim to become the leading manufacturer of high-quality equipment such as long-term embryo incubators, ART workstations, anti-vibration tables, and time-lapse incubators.*

*Our products are designed with the Silent Embryo Hypothesis as a guiding principle. The Silent Embryo Hypothesis states that the less disturbed an embryo can remain, the better its developmental potential will be. Most of our products are designed in Denmark and made in the EU. Our primary focus is to increase pregnancy success rates and patient satisfaction.*

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MEDICAL



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