ESCO
LIFESCIENCES



LR-400S-8



LR-660S-8



LR-1380S-8

Esco Laboratory Refrigerators

Precise temperature control, safe and stable, ensuring the protection of your samples in most environment







Welcome to Esco Lifesciences

Esco Lifesciences' vision is to provide enabling technologies for scientific discoveries to make human lives healthier and safer.

Esco Lifesciences is committed to delivering innovative solutions for the clinical, life sciences, research, industrial, laboratory, pharmaceutical, and IVF communities. With the most extensive product line in the industry, Esco has passed a number of international standards and certifications. Esco Lifesciences represents innovation and forward-thinking designs, that are of the highest standard quality since 1978.

Availability and Accessibility. Esco Lifesciences has headquarters in Singapore, Indonesia, and Philippines, with manufacturing facilities located in Asia and Europe. Research and Development (R&D) is conducted worldwide spanning the US, Europe and Asia. Sales, services, and marketing subsidiaries are located in 42 major markets including US, UK, Japan, China and India. Esco regional distribution centers are located in Singapore, Malaysia, Thailand, Vietnam, Myanmar, Indonesia, Philippines, Bangladesh, Hong Kong, Taiwan, South Korea, China, Japan, India, UAE, Central and South Africa, Denmark, Germany, Italy, Lithuania, Russia, United Kingdom, and USA. Because of our worldwide presence, you can be sure that Esco is within your reach.

High Quality, Reliable, and Dependable. Esco Lifesciences products are of high quality, reliable, and dependable. Cross-functional teams from Esco Production, R&D, Quality Assurance, and Senior Management, are regularly assembled to review and implement areas for improvement.

Esco Lifesciences Cares for Your Safety. Esco Lifesciences focuses on providing safety not just for your samples, but also for you and the environment.

Esco Lifesciences Cares for Your Comfort. Building ergonomic designs and reducing noise levels of the units ensure comfort for our users.

Esco Lifesciences Cares for the Environment. Esco Lifesciences incorporates the latest proven technologically advanced components available. One in every four of Esco's employees is involved in Research and Development and are evaluating new components or designs for better efficiency. Whenever a new technology is available, Esco Lifesciences redesigns technology into our new products that will use lesser energy.

Customer Service and Support. Our service does not stop once purchase has been done. Esco Lifesciences gives on-time customer service such as service training, preventive maintenance, and re-certification, to respond to your equipment needs. Esco Lifesciences also offers free end-user seminars and provides educational materials and informative videos.

As Esco Lifesciences takes the opportunity to respond to the world's needs, we aim not only to contribute to the advancement of scientific discoveries but also in making the world a safer, healthier, and better place to live in.



Products and Application

Laboratory Equipment

Sample Handling and Preparation
- Class I Biological Safety Cabinets
- Class II Biological Safety Cabinets
- Class II Type A2 Biological Safety Cabinets
- Class II Type B1 Biological Safety Cabinets
- Class II Type B2 Biological Safety Cabinets
- Class III Biological Safety Cabinets
- Horizontal Laminar Flow Cabinets
- Vertical Laminar Flow Cabinets
- Laboratory Animal Research Workstations
- Laboratory Centrifuges

Sample Cultivation
- CO_2 Incubators, Direct Heat Air-Jacketed
- CO_2 Incubators with Cooling System
- CO_2 Incubators with High Heat Sterilization
- Laboratory Shakers

Amplification and Detection
- Conventional Thermal Cyclers
- Microplate Shakers
- PCR Cabinets

Sample Storage & Sample Protection Solutions
- Ultra-low Temperature Freezers
- Lab Refrigerators and Freezers
- Sample Database Management Software
- Intelligent Remote Monitoring Application Protocol
- Remote Monitoring, Datalogging, Programming Software
- Wireless Monitoring System
- Liquid Nitrogen Biological Container

Chemical Research
- Ducted Fume Hoods
- Ductless Fume Hoods
- Filtered Storage Cabinets
- Powder Weighing Balance Enclosure
- Exhaust Blowers
- Fume Hood Airflow Monitor

General Equipment
Laboratory Thermostatic Products
- Forced Convection Laboratory Oven
- Forced Convection Laboratory Incubator

Medical / IVF Equipment

Controlled Embryo Handling
- Esco Multi-Zone ART Workstation
- Esco Multi-Zone ART Workstation Class II
- AVT Anti-Vibration Table
- Semi-Closed Environment (SCE) IVF

Safe Embryo Culture
- MIRI® Multiroom Incubator
- MIRI® II Multiroom Incubator
- Mini MIRI® Humidified Incubator
- Mini MIRI® Dry Incubator
- CelCulture® CO_2 Incubator

Innovative Time-Lapse Imaging
- MIRI® Time-Lapse Incubator

Accurate Quality Control
- MIRI® GA Gas and Temperature Validation Unit

Unique Consumables
- CultureCoin®

Healthcare

Esco Pharma Products

Airflow Containment
- BioBooth™
- Ceiling Laminar Airflow (CLAF)
- Cytoculture® Cytotoxic Safety Cabinet
- Pharmacon™ Downflow Booth
- Esco Garment Storage Cabinet
- Esco Glassware Hoods
- Laminar Flow Horizontal/Vertical Trolley (LFH/VT)
- Laminar Flow Straddle Units
- Evidence Drying Cabinet

Isolation Containment
- Advanced Processing Platform Isolator (APPI)
- Aseptic Containment Isoaltor (ACTI)
- Blood Cell Labelling Isolator
- Streamline® Closed Restricted Access Barrier System (SLC-RABS)
- Containment Barrier Isolator (CBI)
  - CBI-Unidirectional (CBI-U)
  - CBI-Turbulent (CBI-T)
  - CBI-Class III Biosafety Cabinet (CBI-III)
  - CBI-Convertible Class III/Class I Biosafety Cabinet (CBI-H)
- Isoclean® Healthcare Platform Isolator (HPI)
  - HPI-G3-Without Filter Below Work Zone
  - HPI-G3-With Filter Below Work Zone
  - HPI-Inflatable Seal (HPI-IS)
- General Processing Platform Isolator
  - GPPI-Inflatable Seal (GPPI-IS)
  - GPPI-Static Seal (GPPI-SS)
- Streamline® Compounding Isolator
  - SCI - Isolator Configuration
  - SCI - Class III Biosafety Cabinet (SCI-III)
- Technetium Dispensing Isolator
- Turbulent Flow Aseptic Isolator (TFAI)
- Weighing and Dispensing Containment Isolator (WDCI)

Cross Contamination Facility Integrated Barrier
- BioPass™ Pass Through
- Cleanroom Air Showers
- Dynamic Pass Boxes/ Dynamic Floor Laminar Hatches
- Infinity® Air Shower Pass Box
- Esco Sputum Booth
- Infinity® Pass Boxes
- Infinity® Cleanroom Transfer Hatch
- Soft Capsule® Soft Wall Cleanroom

Ventilation Containment
- Ventilated Balance Enclosure

Esco VacciXcell Products

Bioreactors and Fermenters
- CelXrocker™
- CelCradle™
- CelShaker™
- CelCradle™ X
- CelCradle Semi-Automated Harvesting System™ (CCX-SAH)
- BioXcell™
- StirCradle™
- StirCradle™ PRO
- TideXcell™
- TideXcell™ Harvesting System (TXLHS)
- VXL™ Hybrid Bioreactor

Cell Culture Monitoring, Media and Consumables
- Super Plus™
- Plus™ Vero
- Plus™ MDCK
- Plus™ MDCK II
- BioNOC™ II macrocarriers
- GlucCell™ Glucose Monitoring System
- CVD Kit

Filling Line Equipment
- Filling Line Isolators
- cRabs (close restricted access barriers)
- oRabs (open restricted access barriers)

Integrated Solutions
- Cell Processing Isolator
- Cell Processing Center

Esco TaPestle Rx Products

Pharmacy Compounding Solutions
- Compounding Pharmacy Isolators (SCI, HPI, CBI, GPPI)
- Safety Cabinets and Enclosures (CYT, Class II BSC, VBE, LFC)
- Aseptic Filling Systems

Radiopharmacy Equipment Solutions
- Radioisotope Fume Hood
- Lead-lined Biosafety Cabinet
- Technetium Dispensing Isolator
- Blood Cell Labeling Isolator
- GMP-compliant Radioisotope Dispensing Isolator

Esco Laboratory Refrigerators offer energy-efficient, reliable cold storage designed for scientific, clinical, and pharmaceutical environments.

Certified temperature uniformity of ±1.5°C/ ≤3°C is maintained across an extended range of operating conditions, supported by an anti-condensation design for most application environments.

Backed by CE certification and intelligent safety features such as 72 hours post-power-failure monitoring and alarm, these refrigerators deliver dependable performance and long-term value, making them a reliable equipment for modern laboratories worldwide.



Product Features



Built-In Safety and Sample Protection

- Real-time alarms for continuous monitoring of critical events
- Anti-condensation design supports clear glass-door visibility in most application environments.
- 72 hours backup battery maintains display, data logging and alarm during outages
- Built-in data logger provides continuous, traceable temperature records



Stable Temperature Control in Wide Ambient Conditions

- Maintains uniformity of ±1.5°C / ≤3°C across all shelf levels in most laboratory conditions
- Operates reliably under ambient temperatures from 10°C to 38°C
- Optimized air-cooling and evaporator prevent ice build up



Eco and User-Friendly Operation

- Low GWP refrigerant (R290) powered by variable frequency technology, with eco-friendly CFC-free polyurethane foam (PUF) insulation material
- Quiet operation for a noise-sensitive lab environment
- Smooth casters and leveling feet enable easy relocation and secure positioning





Intuitive Operation and Monitoring

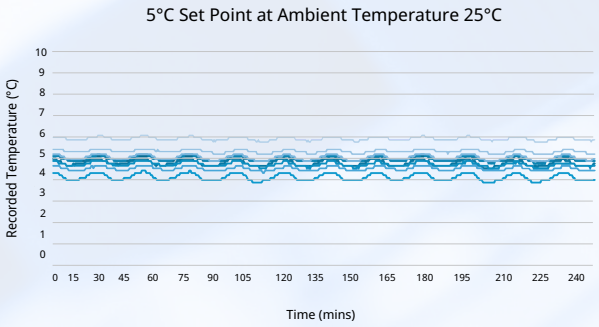
- Bright LED temperature display with real-time temperature monitoring
- Microcomputer system for precise temperature control
- Intuitive user interface with universal controls for easy setup and operation



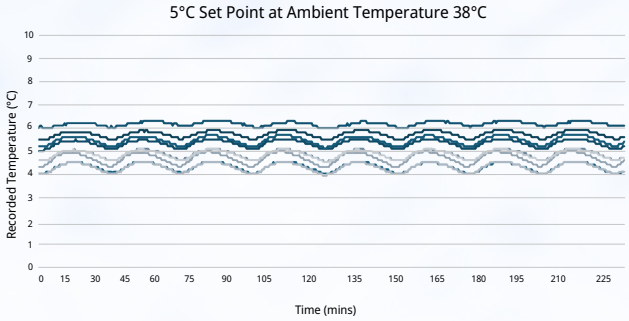
Crafted Design for Flexible Storage

- Designed with adjustable shelves for flexible storage
- SUS304 stainless steel interior surfaces for easy cleaning and contamination control
- Double-glazed glass door offers clear visibility and energy-efficient thermal insulation

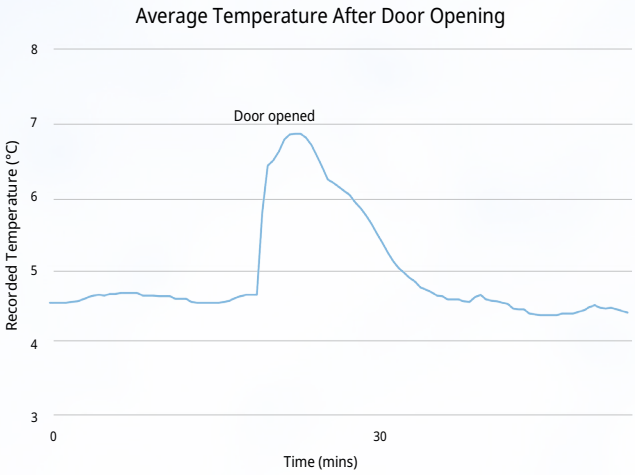
Temperature Stability You Can Trust



Excellent temperature uniformity (±1.5°C / ≤3°C):
Minimal temperature difference between the highest and lowest temperature point. Ensures all samples are stored under consistent conditions, minimizing deviations and preserving sample integrity regardless of its location within the refrigerator.



Consistent performance under extreme environment conditions :
Esco Laboratory Refrigerator delivers accurate and uniform temperature control even in challenging environments. Its performance remains stable at extreme ambient temperature (38°C), similar to operation under standard room temperature (25°C). Esco laboratory refrigerator provides you a reliable solution for your sample storage needs.



Model : LR-1380S-8
Duration of Door Opening : 1 min
Door Opened Angle : 90°
Average Peak Temperature : +6.8°C
Recovery Time : approximately 15 minutes

Rapid forced-air cooling for quick temperature recovery :
Average chamber temperature remained below 7°C after opening the refrigerator door for 1 minute. The chamber temperature recovers to the set point within approximately 15 minutes. Minimal disruption to storage condition in normal operation of most common laboratories.

Esco Laboratory Refrigerator Model Guide

LR - ___ S - 8

Type	Code	Volume	Code	Controller	Code	Power Rating	Code
Laboratory Refrigerator	LR	398 L (14 cu. ft)	400	Standard Controller	S	220-240 VAC, 50/60 Hz	8
		740 L (26.1 cu. ft)	660				
		1386 L (49 cu. ft)	1380				

Laboratory Refrigerator Series

Model	LR-400S-8	LR-660S-8	LR-1380S-8
Item Code	2130182	2130183	2130184
Temperature Setting Range	+2°C to +15°C (35.6°F to 59°F)		
Temperature Uniformity	±1.5°C (±2.7°F) / ≤3.0°C (≤5.4°F)		
Temperature Stability	≤2.5°C (@5°C Setpoint)		
Ambient Temperature and Humidity	+10°C to +38°C (50°F to 100.4°F), < 85%RH		
Exterior Material	SGCC (Hot-Dip Galvanized Steel)		
Interior Material	Stainless Steel, SUS304		
Airflow System	Forced Air Cooling		
Defrosting	Automatic		
Door Lock System	Password Lock (Optional Dual Lock)		
Door Body	1 Heated Glass Door	2 Heated Glass Doors	2 Heated Glass Doors
Casters	4 Casters, 2 Leveling Feet		
Lighting Power	6 W	12 W	12 W
Floor Area	0.46 m^2	0.73 m^2	1.26 m^2
Noise Level (<dBA)	40	45	48
Shelf Load	30 kg (66.1 lbs)		
Number of Shelves/Basket	5 Shelves/1 Basket	12 Shelves	12 Shelves
Data Export	USB Interface		
Data Printing	Dot Matrix Printer (Optional)		
Alarm/Safety Functions	High/Low Temperature, Power Failure, Low Battery, Door Open Timeout, Sensor Fault		
Net Weight	129 kg (284.4 lbs)	190 kg (418.9 lbs)	250 kg (551.1 lbs)
Shipping Weight	157 kg (346.1 lbs)	223 kg (491.6 lbs)	293 kg (645.9 lbs)
External Dimensions (W x D x H)	670 x 720 x 1970 mm (26.4" x 28.3" x 77.5")	1100 x 710 x 1970 mm (43.3" x 28" x 77.5")	1440 x 920 x 1970 mm (56.7" x 36.2" x 77.5")
Internal Dimensions (W x D x H)	570 x 549 x 1320 mm (22.4" x 21.6" x 52")	1000 x 500 x 1590 mm (39.3" x 19.6" x 62.6")	1340 x 710 x 1530 mm (52.7" x 28" x 60.2")
Shipping Dimensions (W x D x H)	835 x 826 x 2171 mm (33" x 32.5" x 85.5")	1230 x 800 x 2170 mm (48.4" x 31.5" x 85.4")	1575 x 980 x 2170 mm (62" x 38.5" x 85.4")

Accessories List	
Item Code	**Description**
2130194	LR-400S-8, Password Lock with Safety Key and Installation Panel
2130195	LR-660S-8, Password Lock with Safety Key and Installation Panel
2130196	LR-1380S-8, Password Lock with Safety Key and Installation Panel
2130197	Dot Matrix Printer, White, RS232 Communication Interface
2130198	Dot Matrix Printer Paper, 57W x 30D mm
2130199	Shelf for LR-400S-8
2130200	Left Shelf for LR-660S-8
2130201	Right Shelf for LR-660S-8
2130202	Left Shelf for LR-1380S-8
2130203	Right Shelf for LR-1380S-8
2130204	Bottom Wire-frame Drawer for LR-400S-8
2130205	Plastic Shelf Support, White

OUR SERVICES

We Provide a One-stop Solution from Installation to Decommissioning of Your Equipment!

Expert Support from Start to Finish

Our team provides full technical assistance from installation, calibration, user training, to decommissioning. Comprehensive documentation and service reports are included for traceability and compliance purposes.

Fast Response

We offer responsive technical support within 24 hours for priority clients. Our support team is easily reachable via email and phone.

Dedicated Regional Service Team

Our Field Service Representatives are trained to provide fast and reliable service, with access to ready spare parts and factory-level technical support.

Commitment to Service Excellence

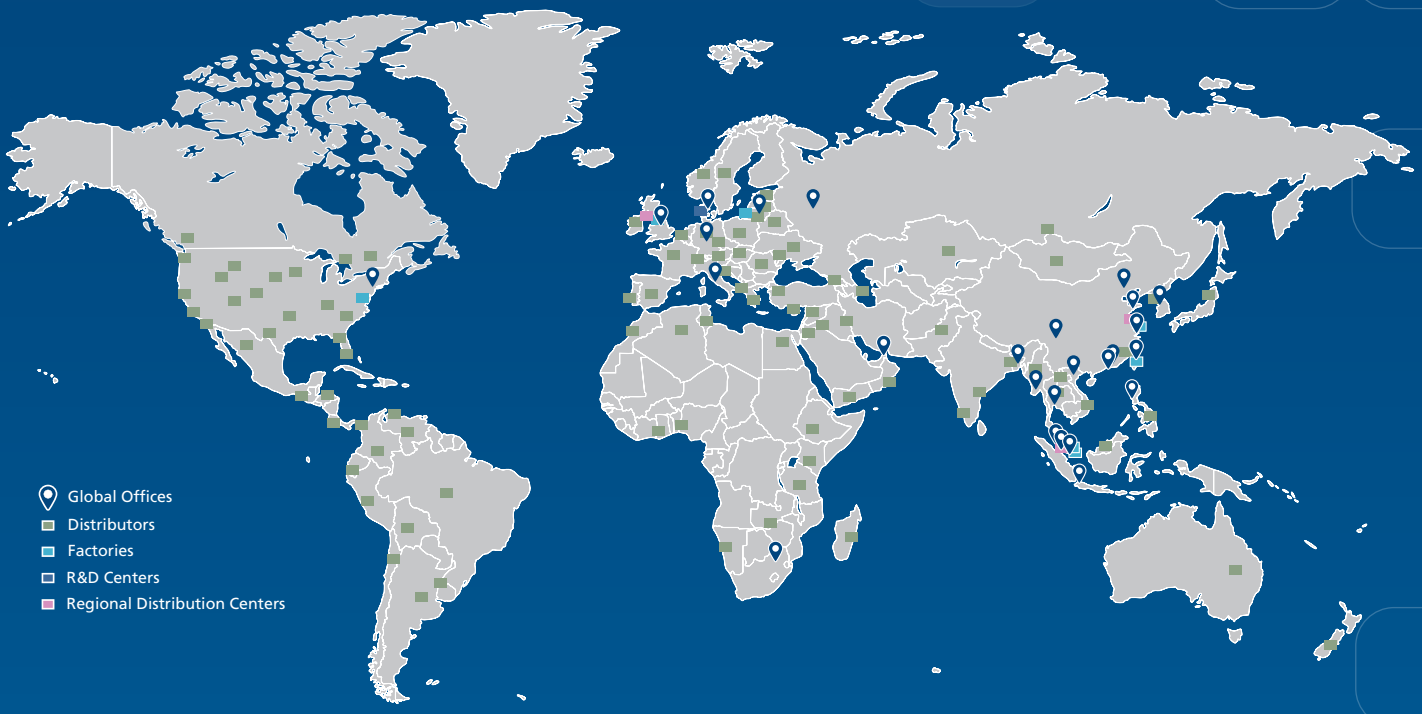
We aim to exceed customer expectations through timely, consistent, and professional support throughout the equipment lifecycle.



Safeguard Your Equipment with our Service and Warranty Package!

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ESCO LIFESCIENCES GROUP

Esco Micro Pte. Ltd. • 19 Changi South Street 1 • Singapore 486779
Tel +65 6542 0833 • Fax +65 6542 6920 • mail@escolifesciences.com
www.escolifesciences.com

Esco Technologies, Inc. • 903 Sheehy Drive, Suite F, Horsham, PA 19044, USA
Tel: +1 215-441-9661 • Fax 484-698-7757
eti.admin@escolifesciences.com

Esco Lifesciences Group Offices: Bangladesh | China | Denmark | Germany | Hong Kong | India | Indonesia | Italy | Japan | Lithuania | Malaysia | Myanmar | Philippines | Russia | Singapore | South Africa | South Korea | Taiwan | Thailand | UAE | UK | USA | Vietnam

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