

# Hypoxia Incubator Chamber (TRI-GAS Incubator)

## Managing, Optimal Environmental for Cell Growth

The hypoxia chamber should be ideal for the experiments of the cultivation of mammalian cell culture, sperm/ovum, anaerobic cells, and all sorts of microbe cells, hatching/germinating and special tissues.

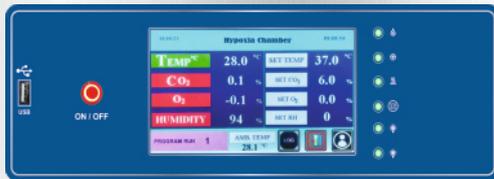
**Dual Beam IR  
CO2 Sensor**  
0 to 100% | SS-304 Casing  
0 to 20% | SS-304 Casing



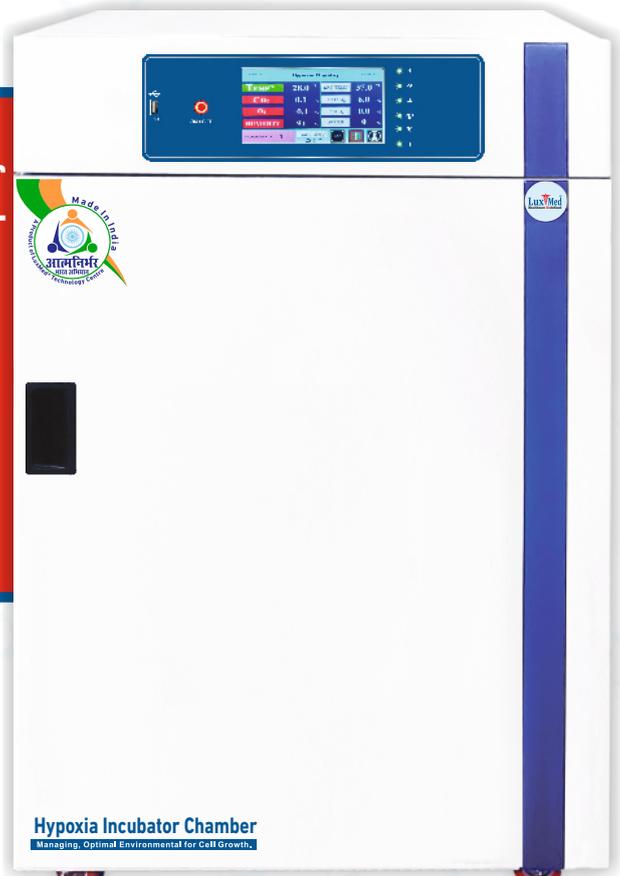
Registered Design No.: 374333-001

### Features:

- The inner chamber of the hypoxia chamber have volume of 50 / 100 / 150 / 180 liters with Multi Gas Supply (N2



7" Touch Screen Display



- & CO2).
- LuxMed<sup>®</sup> Hypoxia Chamber have Ergonomic Display and Control system with connection port designed to observe the status of equipment in real time even in the far distance.

- LuxMed<sup>®</sup> Hypoxia Chamber have LED display with Individual 2-channel touch button operating panel.
- Fast CO2, O2, N2, temperature and humidity recovery without overshoot.
- LuxMed<sup>®</sup> Hypoxia Chamber have In-line filters remove gas impurities and contaminants.
- LuxMed<sup>®</sup> Hypoxia Chamber have Fast heat-up, fast-recovery, reliable control.
- Digital PID controlled Temperature range should be ambient + 5 °C ~ 60 °C with accuracy of + 0.4 °C(37°C) and resolution of 0.1 °C
- LuxMed<sup>®</sup> Hypoxia Chamber have 6 sides direct heating system and the electric heating wire should be covered on all sides of the chamber to make good uniformity and to provides fast heat-up & temperature recovery. Gentle air and moisture convection air and moisture in the chamber should be distributed naturally by 6 side heating and the air circulation fan.
- LuxMed<sup>®</sup> Hypoxia Chamber Independently validated overnight cycle ensures complete elimination of all biological contaminants.
- LuxMed Hypoxia Chamber has optional High-Temperature Disinfection [HTD] of a 180 °C for 2 hours. Entire HTD cycle will not take more than 14 hours
- LuxMed<sup>®</sup> Hypoxia Chamber have 140 °C dry hot air sterilization, conforms to the International standards for dry heat sterilization, and proven to effectively deactivate normally-resistant fungi, bacterial spore and vegetative cells. Non-toxic and non-corrosive sterilization that completes within 12 hours leaving the chamber cool and dry at the end of the cycle.
- The 3 parts of heating section should be controlled and calibrated individually by 3 individual temperature sensors.
- LuxMed<sup>®</sup> Hypoxia Chamber have antimicrobial powder coating to eliminates 99.9% of surface bacteria within 24 hours of exposure.
- LuxMed<sup>®</sup> Hypoxia Chamber be dry wall and air jacket system with warm air from heating wire which preserved in space between the chamber and the insulation layer to helps temperature recover faster and minimize heat loss.
- LuxMed<sup>®</sup> Hypoxia Chamber have lower gas consumption and lower heat loss.
- LuxMed Hypoxia Chamber has input gas pressure of 0.1 MPa and operational gas pressure requirement range of 0.05 -0.15 MPa
- LuxMed<sup>®</sup> Hypoxia Chamber have dual beam IR CO2 Sensor for fast & precise detection for CO2 gas regardless of temperature and humidity.
- Microprocessor controlled CO2 ranges should be 0%~20% with Accuracy of ±0.1% (5%/37°C), resolution of 0.1% and Inlet pressure range of 0.5~0.6 bar.
- LuxMed<sup>®</sup> Hypoxia Chamber have natural humidification using water tray.
- LuxMed<sup>®</sup> Hypoxia Chamber have O2 Range of 0.5 ~ 21% with zirconium dioxide sensor.
- LuxMed<sup>®</sup> Hypoxia Chamber have circulation fan to delivers the moisture formed from the water to the entire chamber.
- LuxMed<sup>®</sup> Hypoxia Chamber have front door heater & frame heater to prevent condensation in the chamber and on the glass door.
- LuxMed<sup>®</sup> Hypoxia Chamber have ULPA/HEPA filtration. Filtered air circulates across the humidity pan to accelerate the humidifying process.
- LuxMed<sup>®</sup> Hypoxia Chamber have microprocessor PID control to Intelligence control for CO2 density, temperature and alarm.
- Alarm system should remind the user to replace CO2 tank and ULPA filter.
- LuxMed Hypoxia Chamber has Inbuilt Internet of Things (IoT) technologies
- CO2 recovery rate of 6 min after door opening and closing event to attain 5% CO2
- All gas inlet into the chamber are HEPA filtered, filters are of ISO-9001:2008 standards all materials pass USP Class VI requirements
- LuxMed<sup>®</sup> Hypoxia Chamber have rounded corner which allows easy cleaning.
- The entire chamber should be made of stainless steel (SUS304).
- Heating of the chamber should automatically cut by safety device when temperature control failed or there is excessive heating over set point.
- LuxMed<sup>®</sup> Hypoxia Chamber be provided with minimum two perforated shelves made of stainless steel which are resistant against rust and contamination.
- LuxMed<sup>®</sup> Hypoxia Chamber have O2 Nos. Access ports at the back to allow for external probes
- LuxMed<sup>®</sup> Hypoxia Chamber have alarm system for low or high deviation of CO2 and temperature.
- LuxMed<sup>®</sup> Hypoxia Chamber be provided with complete accessories to run the system at the installation site and one filled CO2 cylinder with three CO2 valve

- Model – HC-180D – 160 to 180 Ltr
- Model – HC-100D – 90 to 100 Ltr

