animal hypoxia and hyperoxia chamber with gas control system

Animal hypoxia and hyperoxia chamber through the gas control system can accurately control the gas environment inside the test chamber, real-time monitoring of animal modeling oxygen, carbon dioxide concentration changes, to provide the specific gas conditions required for research.

Animal Hyperoxic Chamber

The Animal Hyperoxic Chamber enables researchers to characterize animal models under hyperoxia, hypoxia, and hyperoxia cycling, facilitating efficient disease treatment research and animal model establishment. It supports acute and chronic intermittent hypoxia, pre-acclimatization, gradient hypoxia, acute hyperoxia, and precise gas concentration control for various experimental requirements. The chamber allows programmable rapid gas concentration changes, simulating brain and heart hypoxia and supporting therapeutic mode studies.

Scope of Application

1. **Cardiopulmonary Disease Research:** Studies of heart hypoxia (abnormal myocardial activity), and hypoxia due to pulmonary fibrosis.
2. **Brain Disease Research:** Simulation and study of brain tissue hypoxia, cerebral thrombosis, stroke, tissue death, and mechanisms such as hypoxia-induced cerebral edema.
3. **Ocular Diseases:** Research on hyperoxia-induced retinal neovascularization, retinopathy of prematurity, and photoreceptor cell protection.
4. **Stem Cell Research:** Hypoxia-driven survival, proliferation, and differentiation of specific stem cell types.
5. **Oxygen Therapy:** Pathology treatment model establishment; intermittent and repeated hypoxia responses.
6. **Drug Research & Development:** Simulates organism hypoxia to evaluate drug efficacy.

Working Conditions

- Power: 220V, 50/60Hz, 4A
- Environment: Ambient temperature 25°C, humidity <90%