

BSYHHG Series Comprehensive Drug Stability Test Chamber

Scope of Application

The Comprehensive Drug Stability Test Chamber simulates drug storage and transportation environments by precisely controlling temperature, humidity, and light. It is designed for pharmaceutical companies, biotechnology institutions, and scientific research units.

Its applications include drug stability assessment (accelerated, long-term, and strong light irradiation testing), shelf-life determination, and quality control (packaging and storage optimization). It meets international standards like GMP, FDA, and ICH, and supports new drug development and material weather resistance testing (e.g., cosmetics, food packaging).

Structural Features

Outer Casing

Constructed from cold-rolled steel plate with electrostatic baking paint, forming a dense, robust, and rust-resistant protective layer. Includes a standard 25 mm test port and a safety lock on the outer door.

Working Chamber

Features a mirror-polished SUS304 stainless steel interior with quick-release shelf brackets for easy installation and removal. Equipped with built-in UV sterilization (time-adjustable).

Viewing Glass

Double-door design with a tempered inner glass, allowing direct outer door opening for observation without affecting internal temperature due to effective sealing.

Air Flow

Strong convection ventilation ensures efficient air circulation, improving temperature response, uniformity, and reduc

Control Panel

Microcomputer-based intelligent touch screen controller offers high precision, no overshoot, multi-data display, temperature calibration, timer, and program control (0–30 segments, 0–9999 cycles). Includes remote alarm/ control, USB interface for real-time data storage, and a standard miniature needle printer.

Refrigeration System

Dual compressor system (backup or alternating use) enhances service life and ensures stable operation (standard for 280L+ models).

Light Source

Cold light sources minimize heat, stabilizing internal temperature. Top-mounted vertical lighting with two panels ensures uniform distribution. Adjustable intensity (red/blue/white/plant growth lights available).

UV System

Real-time UV meter display meets requirements for near-UV energy ≥200 W·hr/m² (per chemical drug stability guidelines). UV irradiance: 80–100 µW/cm²; spectrum range: 320–400 nm.

Humidification System

Uses first-tier humidity sensors with internal humidification technology (Type 316 tube for steam generation), ensuring low humidity fluctuation and good uniformity. External 25L tank lasts 15–20 days per fill.

Pharmacopoeia Standards

Complies with GMP, FDA, ICH, and National Pharmacopoeia requirements.

Safety System

Includes inner chamber temperature protection, compressor over-current/over-pressure protection, and multiple safety mechanisms.

Model	BSYHHG-100L-AC	BSYHHG-180L-AC	BSYHHG-280L-AC	BSYHHG-380L-AC	BSYHHG-580L-AC	BSYHHG-800L-AC	BSYHHG-1080L-A	BSYHHG-1680L-A
Door	Single Door					Double door		
Temperature Control Range	With Light 10~80°C / Without Light 0~80°C							
Temperature Fluctuation	±0.5°C							
Temperature Uniformity	±1°C (Tested at 25°C)							
Humidity Range / Deviation	30~95% / ±3%RH							
Humidity Resolution	0.1°C							
Light Intensity	0~20000 Lux (Stepless adjustment, standard with two light panels, optional to add more)							
Timer Range	1~9999 min							
Refrigerant	R134a							
Power Supply	AC220V 50HZ							
Rated Power	1600W	1800W	2100W	2200W	2400W	4000W	4200W	5500W
Inner Dimension WxDxH (cm)	45x40x56	50x46x78	58x52x94	58x54x122	70x58x125	120x52x129	120x70x130	146x85x136
Overall Dimension WxDxH (cm)	59x67x107	66x77x128	74x81x147	74x85x172	86x91x182	136x93x188	136x101x187	162x116x193
Trays (Standard / Max)	2/8 pcs	3/10 pcs	3/11 pcs	4/12 pcs	5/10 pcs	8/10 pcs	8/12 pcs	9/13 pcs