

## Special Large Size HAST Chambers

There is an increasing demand for highly accelerated stress tests on parts and materials, driven by the higher density of electrical and electronic components. The Highly Accelerated Stress Test System (HAST Chamber) is specifically designed for bias testing using a set applied voltage and signal.

Our EHS-432M model is a special larger chamber, including a deeper version, providing two options beyond our standard models. Their larger test capacity and shorter test times compared to typical 85/85 humidity resistance tests make them a compelling choice for increased test throughput to ensure product reliability.

The recommended M-type control offers flexibility of three operation modes: wet-bulb temperature control, unsaturated control, and wet/saturated control.

### Unique Features of ESPEC HAST Chambers:

- Single-vessel design – Humidity generated naturally inside the chamber
- Magnetic-couple fan – No moving shaft thru the pressure vessel
- Wet bulb measurement – Provides more accurate humidity readings, especially important when the chamber is not under pressure
- Air-HAST option – For improved oxidation of DUTs
- Freestanding design – Supply and waste-water tanks are built in
- Designed for reliable heat-up and cool-down without pressure or moisture issues



### Specifications:

	EHS-432M (std)	EHS-432M-L (long)
Internal Dimensions	21.5" diameter x 22" depth (550 x 560 mm)	21.5" diameter x 30" depth (550 x 760 mm)
External Dimensions	31.5" x 50" x 62" 800 x 1260 x 1575 mm	31.5" x 58" x 62" 800 x 1460 x 1575 mm
Unsaturated Control	Temperature control range 105.0 - 162.2°C Humidity control range 75 - 100%rh Pressure range 0.0196 - 0.392MPa (Gauge) Heating and pressurization time: approx. 90 minutes (120 min. L version)	
Saturated Control	Temperature control range 105.0 - 151.1°C Pressure range 0.0196 - 0.392MPa (Gauge) Heating and pressurization time: approx. 90 minutes (120 min. L version)	
Dry & Wet-bulb temperature control (M mode)	Temperature control range 105.0 - 162.2°C Humidity control range 75 - 95%rh Pressure range 0.0196 - 0.392MPa (Gauge) Heating and pressurization time: approx. 120 minutes (150 min. L version)	

Conforms to HAST testing standards for semiconductors:

- IEC 60068-2-66: Compact electrical and electronic components (Unsaturated)
- IEC 60749-4: Semiconductor devices (Unsaturated)
- EIAJ ED-4701: Semiconductor devices (Unsaturated)
- JESD22-A110E: Non-hermetically sealed (not hollow) device (Unsaturated)
- JESD22-A102E: Non-hermetically sealed IC discrete device (Unsaturated)

\* We recommend the M type chambers for the above testing standards.