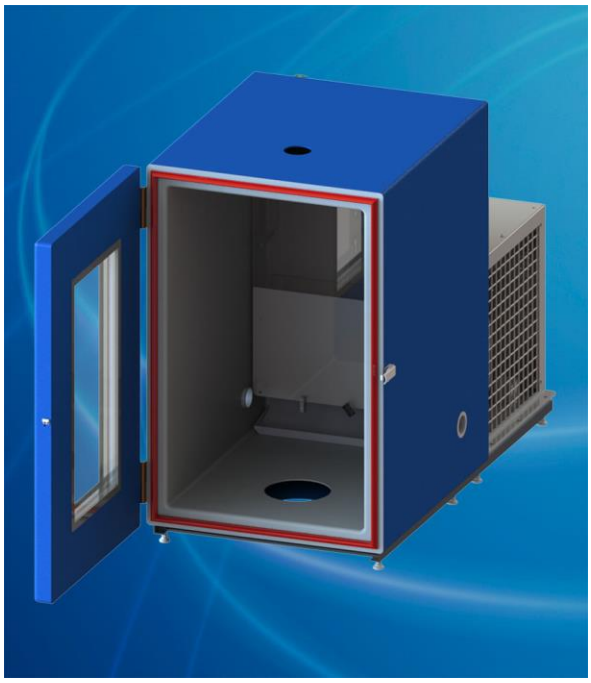
Environmental Chambers (ECH Series)



- Temperature range of -10° to +60°C
- Better than ± 0.5°C temperature control precision
- Temperature controlled using PC (WIN-CATS) software through PID digital temperature controller or with manual control box
- Window for visual monitoring of the specimen during testing
- External Dimensions
  - 24 inches wide by 50 inches deep by 38 inches tall
- Internal Dimensions
  - 19 inches wide by 22 inches deep by 31 inches tall
- Weight – 450 pounds
- Other versions available with extended temperature range and LN_2 attachments. Please contact GCTS for more details

DESCRIPTION

The GCTS Environmental Chamber is a temperature control device capable of accommodating the testing fixtures for soil, asphalt, rock and other construction materials while maintaining the temperature of the specimen with high degree of accuracy.

The standard ECH-15FG includes a refrigeration unit for temperature control down to -10°C. This is sufficient for most standard performance tests. LN_2 attachments can be added for testing below this range.

The ECH Environmental Chambers can be coupled with the GCTS Signal Conditioning and Control Unit (SCON), which allows the user to control the specimen temperature (or rate) during testing or preset the required temperatures within the application's testing module as prescribed by the selected standards (AASHTO, EN, etc.). This is done through the advanced cascade PID controller included with the GCTS Computer Aided Testing Software (CATS) package. This option enables the user to monitor multiple temperature sensors, therefore recreating highly accurate in-situ conditions. The temperature control precision is better than ±0.5°C.

GCTS also offers a compressed air dryer to prevent frost/condensation inside the chamber when cooling with the refrigeration unit. The miniature dryer ultra-dries the air to -40°C dew point (requires 100 psi (700 kPa) clean air supply). The compressed air dryer is recommended for testing at locations with medium to high air humidity.