



Global-N Series Temperature and Humidity Chambers

**Faster temperature cycling
chambers for worldwide testing
of electronics, semiconductors,
and automotive components**



Faster chambers

380 or 800 liter models

for production and qualification
level testing – change rates up
to 15°C per minute



The 800 liter model EGNX28 fits on a space 1205 mm wide by 1960 mm deep (47 by 77 in.).



World-Standard Performance and Features on a Minimal Footprint

The Global-N series chambers from ESPEC provide the temperature and humidity test capabilities you need to validate quality and reliability for increasingly-sophisticated electronics and other products. Models are available in two volumes, 380 and 800 liter (12 and 28 cubic foot), along with performance capabilities as high as 15°C per minute. Controlled humidity is also an available feature.

Global-N chambers meet JEDEC, IEC, and other international test performance standards. The units can be installed around the world for consistent testing at different facilities, supported by your local ESPEC service group.

For all their capabilities, Global-N chambers are unusually compact, so they won't monopolize your lab space. They are especially narrow to minimize their front-facing size. A lower interior floor makes loading easy for operators of different heights.

Built to be Fast and Reliable

Global-N chambers deliver remarkable temperature change rates with aggressive, convective airflow and high-performance, durable components. Please consult with your ESPEC representative or visit www.espec.com/faster to request a performance calculation and model selection based on your test profile and sample load.

Fully Adjustable Controller Pod with Touch-Screen Control

Global-N chambers come with a new, fully-adjustable controller pod that will please users of different heights. The pod's height and viewing angle are infinitely adjustable to fit any operator's preference, and it can be used while seated. The pod is also fully removable for move-in and transportation.

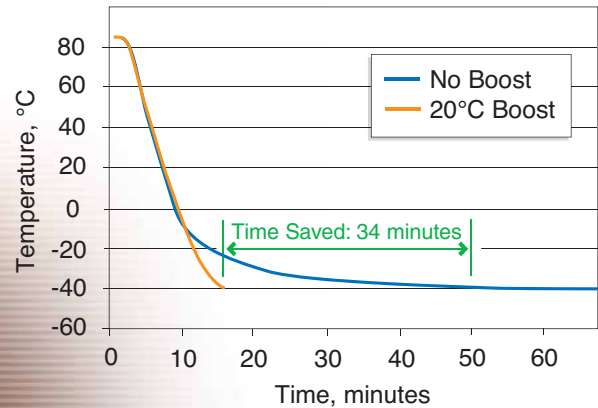
At the heart of the pod is ESPEC's touch-screen programmable controller that makes it a breeze to set up, run, and monitor the chamber, even for infrequent users.



The 380-liter model EGNX12 has a footprint of 805 mm wide by 1905 mm deep (32 by 75 in.).

As shown in the example below, setting the chamber for a 20°C air temperature boost (air at -60°C) achieved the -40°C product temperature in just 16 minutes, compared to nearly 50 minutes with the chamber air set at -40°C.

Example Product Temperature Recovery Time



Designed for Serviceability and Safety

For safety and compliance, Global-N chambers are CE-marked. Service access panels on Global-N chambers are hinged for fast access. All models feature three levels of overheat protection.

The system controller provides alarm messages with specific troubleshooting help to quickly resume testing. Refrigeration gauges help you monitor system performance and pinpoint service needs.

The world-wide ESPEC Group is prepared to support the Global-N series in your local area. Factory training and local parts supply mean fast, knowledgeable support.

Optional Product Temperature Control

- Monitors product temperatures
- Faster product change rates
- Shortens testing time

During testing, product temperature changes can lag air temperatures by 20°C or more. Our optional product temperature control feature lets you drive faster change rates by directly monitoring product temperatures and overshooting normal setpoints for chamber air temperatures. This boost capability lets you almost double product temperature change rates, so you can complete your tests sooner.



The controller pod uses ESPEC's touch-screen programmable controller. Pod height and viewing angle are infinitely adjustable.

Specifications and Options

Standard Features

- Stainless steel interior *and* exterior
- Unique thermal-break doorframe and ports limit condensation & frosting
- Window with full-surface heaters for a clear view
- One 45-kg capacity shelf with adjustable support rails
- One 100mm diameter cable port (additional ports optional)
- Casters with adjustable feet
- Three levels of overheat protection
- Diagnostic alarms for quick troubleshooting
- Relay contact for interlocking external devices to chamber for safety
- Door dew-tray keeps drips off lab floor when door is opened
- Refrigeration gauges and hinged service panels make maintenance easy

Available Options

- Circular, strip, or paperless chart recorders for data-logging
- Computer interfaces and software for remote control and data-logging
- Product temperature control for enhanced recovery times
- Additional shelves and cable ports
- Portable humidity water tank with pump
- Dry air purge to limit risk of condensation during temperature cycling
- Low and ultra-low humidity systems (see chart at right)
- Customization to meet specific requirements easily made

Specifications and features subject to change.

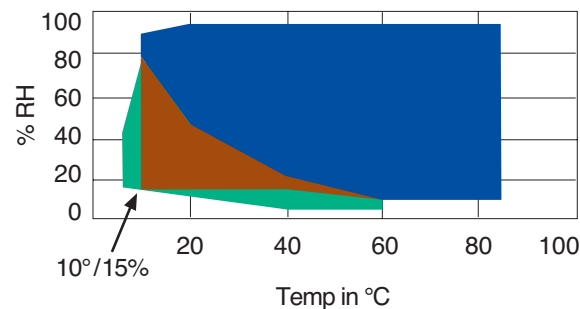
Details on Global-N models available at www.espec.com/faster

Sizes and Performance Ranges

Model	Change Rate*	Temperature Range	Humidity Range	Interior Volume	Interior (W x D x H)
EGNX12-4CWL	5°C/m	-70 to 180°C (-94 to 356°F)	10 to 95% RH	380 L	600mm x 743mm x 850 mm (24in x 29in x 33in)
EGNX12-6CWL	10°C/m				
EGNX12-7.5CWL	15°C/m				
EGNX28-6CWL	5°C/m			800 L	1000mm x 800mm x 1000mm (39in x 31in x 39in)
EGNX28-12CWL	10°C/m				
EGNX28-15CW	15°C/m				
EGNZ12-4CWL	5°C/m		none	380 L	600mm x 743mm x 850mm (24in x 29in x 33in)
EGNZ12-6CWL	10°C/m				
EGNZ12-7.5CWL	15°C/m				
EGNZ28-6CWL	5°C/m			800 L	1000mm x 800mm x 1000mm (39in x 31in x 39in)
EGNZ28-12CWL	10°C/m				
EGNZ28-15CW	15°C/m				

*Change rate calculated per IEC 60068, measured at supply air with empty chamber
380L models exterior: 805mm x 1905mm x 1755mm (except 15°C/m model)
800L models exterior: 1205mm x 1960mm x 1930mm (except 15°C/m model)

Humidity Control Range



Blue = standard,
Red = Low,
Green = Ultra-low

ESPEC

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