

Agilent Helium Leak Detector

New Product Introduction

January 2018



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Product Introduction

A general purpose leak detection instrument available in several configurations to address a broad variety of applications

- Wet or dry pumps – from industrial applications to cleanrooms
- 2 to 30m³/hr pumps – small parts to large chambers
- New 30m³/hr DS 602 RVP
- Portable, mobile or bench form factors
- Vacuum or sniffing modes

Significantly improved user interface and touchscreen

Six pre-programmed application setups – promotes ease of use for both new and experienced users

2-year warranty



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Specifications

Detectable mass: 4

Pumping speed for helium: 1.8 l/s

Sensitivity: 5×10^{-12} mbar·l/s

Display range: 10^{-4} – 10^{-11}

Maximum Test Port Pressure: 13 mbar

Wireless remote

Eight languages

Analog, RS232 and discrete IO interface options



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Configurations

Model Number	Description	Form Factor	Primary Pump	Pumping Speed
G8610A	Helium Leak Detector PR02 Configuration	Portable	RVP, DS40M	2m ³ /hr
G8610B	Helium Leak Detector PD03 Configuration	Portable	Dry Scroll IDP-3	3m ³ /hr
G8611A	Helium Leak Detector MR15 Configuration	Mobile	RVP DS 302	15m ³ /hr
G8611B	Helium Leak Detector MD30 Configuration	Mobile	Dry Scroll TriScroll 620	30m ³ /hr
G8611C	Helium Leak Detector MD15 Configuration	Mobile	Dry Scroll IDP-15	15m ³ /hr
G8611D	Helium Leak Detector MR30 Configuration	Mobile	RVP DS 602	30m ³ /hr
G8612A	Helium Leak Detector BR15 Configuration	Bench	RVP DS 302	15m ³ /hr
G8612B	Helium Leak Detector BD30 Configuration	Bench	Dry Scroll TriScroll 620	30m ³ /hr
G8612C	Helium Leak Detector BD15 Configuration	Bench	Dry Scroll IDP-15	15m ³ /hr
G8612D	Helium Leak Detector BR30 Configuration	Bench	RVP DS 602	30m ³ /hr

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Features...

8.4" display

- 3X the size of VS display
- Rotates 180°



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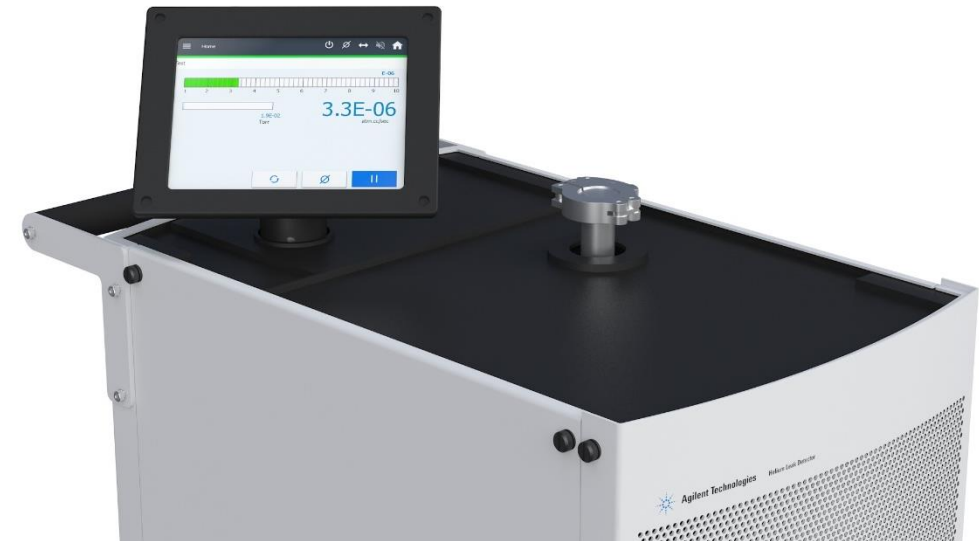
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- Large pivot wheels
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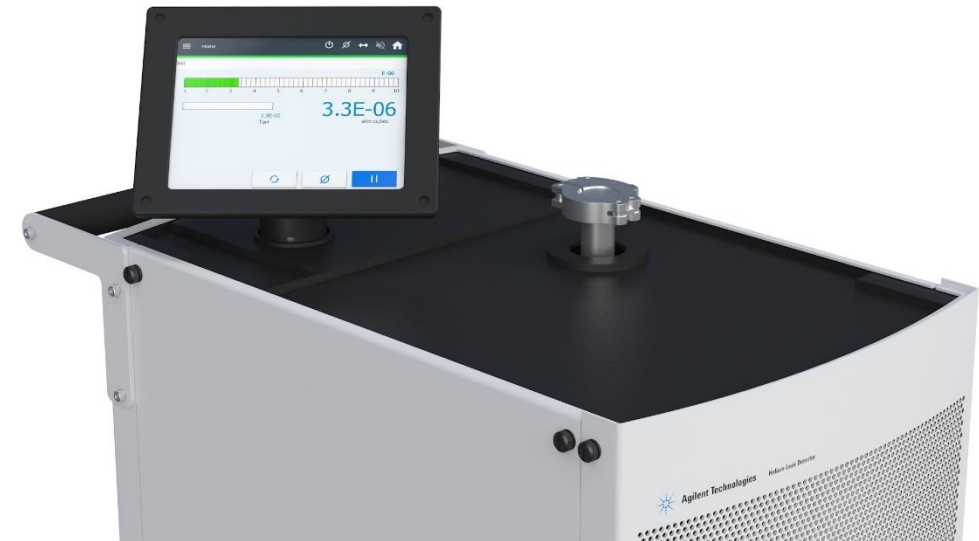
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- Easy access for service
- Opening to view oil sight glass



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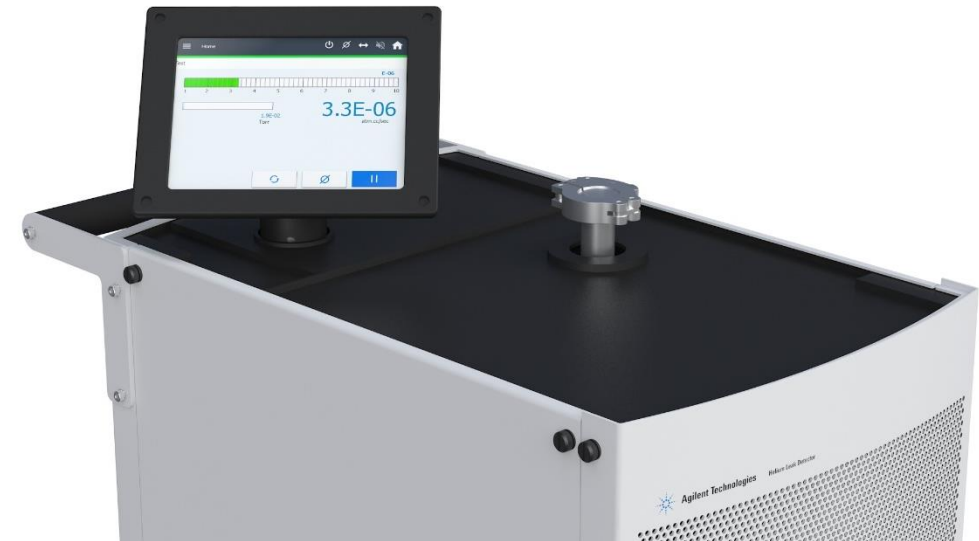
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Work surface with ~6X the area for tools, parts, etc.



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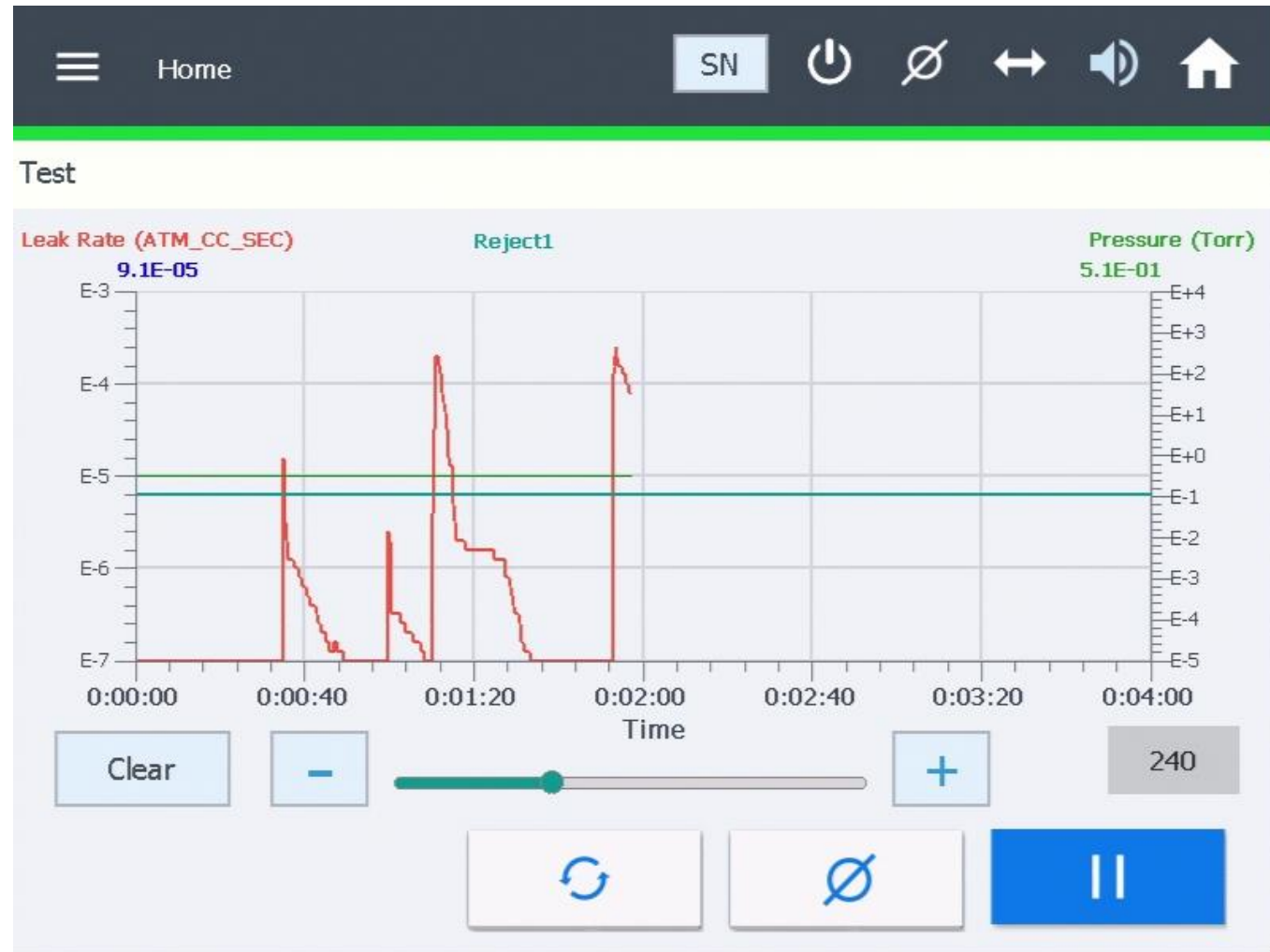
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Enhanced charting capabilities

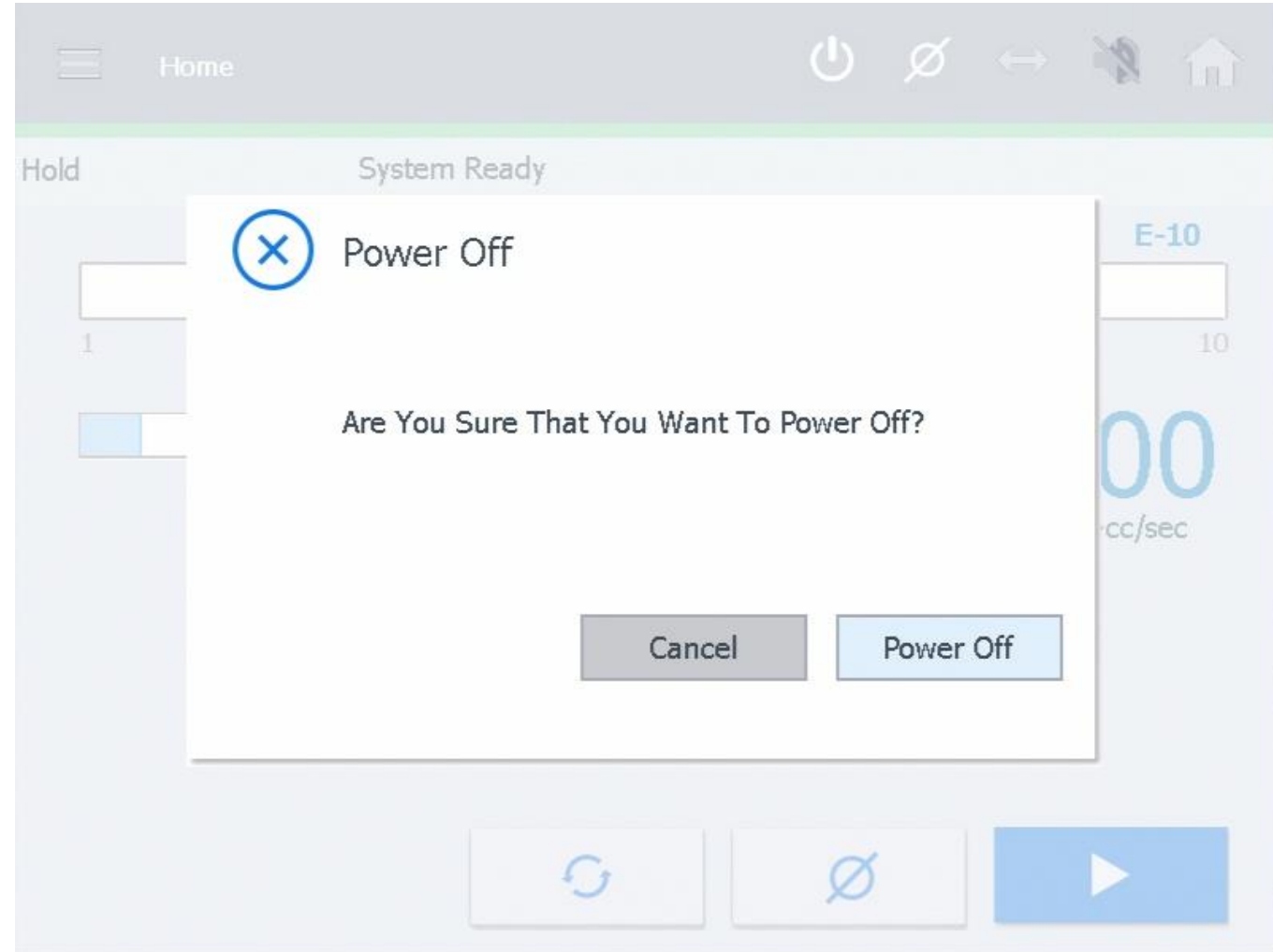
- Zoom for closer inspection of data
- Color-coded set points
- Plots leak rate and pressure
- Double tap to restore



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Features...

Improved power-off process, keeps spectrometer under vacuum and protects turbomolecular pump



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Improved power-off process, keeps spectrometer under vacuum and protects turbomolecular pump

1st time startup wizard

The image displays two screenshots of the Agilent HLD System Setup interface, showing the initial configuration options.

Left Screenshot (System Setup):

- Auto-Zero<0: ☐
- Bar Graph: ☒ Linear, ☐ Log
- Audio Muted: ☒
- Touch Sound: ☐

Right Screenshot (System Setup):

- Language: English
- Units: atm-cc/sec
- Leak Rate: (dropdown menu)
- Pressure: Torr
- Date & Time: 11/14/2017 06:29:07

Both screenshots include a 'Home' button in the top right corner and a 'Next' button in the bottom right corner.


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1st time startup wizard

New Quick Start card



Agilent Technologies Helium Leak Detector
G8610, G8611, and G8612 Series Quick Reference Card

Start Up (Manual Section 1.3.4)
Installation: Do not install or use the pump in an environment exposed to atmospheric agents (rain, snow, ice), dust, aggressive gases, or in explosive environments or those with a high fire risk. During operation, the following environmental conditions must be respected.

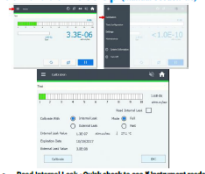
- Temperature: from +12 °C to +45 °C
- Relative humidity: up to 90% (non-condensing)

Plug in power cord, flip switch ON behind unit.

Wait about 7 minutes for "SYSTEM READY"

First time startup will prompt a wizard to help select language, units, date, time, and options. These may be changed any time through the menu screens.

Calibration Set Up (Manual Section 4.1)




- Read Internal Leak - Quick check to see if instrument reads calibrated leak correctly
- To Calibrate:
 - Select Internal Leak and Full
 - Tap Calibrate.
 - Tap OK when calibration is complete.

Manual Number G8610-90000, Rev. C
November 2017


Menu Navigation (Manual Section 1.5)

Menu	Navigation
Calibration	Calibrate with Internal/External Leak
Test Configuration	Full Spectrometer Calibration/ Fast Gain Adjustment Set Point: Leak Rate, Pressure, Audio High Pressure Test, Fine Test Only Auto-Zero < 0, Gross Test, Transfer Points (to Test), Stabilization Wait Time
Settings	Application Setup Main Settings Screen Settings Remote Control Password and Restrictions General Manual Tuning
Maintenance	Valve Control Pump Gauge Calibration System Defaults
System Information	System Information Current Setup
Turn Off	Turn Off




Agilent Technologies Helium Leak Detector
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Main Controls (Manual Section 1.5)




- Test - Measure helium leak rate
- Hold - Isolate leak detector from connected vacuum system while keeping both under vacuum
- Zero - Nullify current leak rate reading and establish a new baseline
- Exit - Bring test port to atmospheric pressure


Home Screen Display (Manual Section 1.5 and 3.11)



Application Setup (Manual Section 5.1.3)



Shutdown (Manual Section 1.3.5)
Tap the Power icon and follow the prompts.



You must consult operations manual, p/n G8610-90001, provided with the leak detector, in order to operate the equipment in a safe manner.

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Test port quick release clamp



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Nitrogen vent standard

New MR30/BR30 configurations

- DS 602 pump
- Ideal for large volumes



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Mist eliminator included on MR15 and MR30

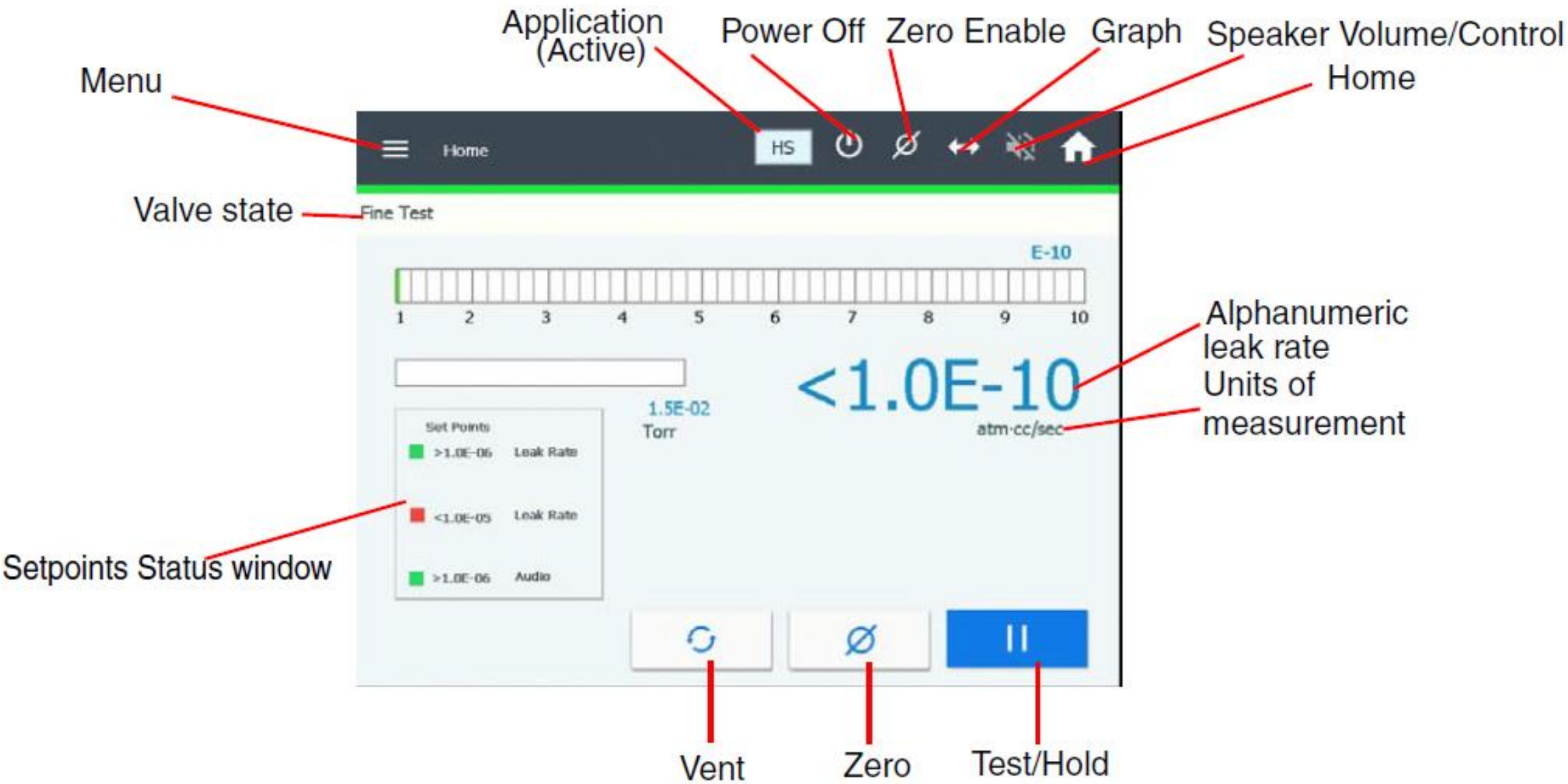


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GUI & Application Setups



HLD UI Features



HLD UI Features

Larger screen

- Excellent touch response
- Two home screens
- 180° rotation

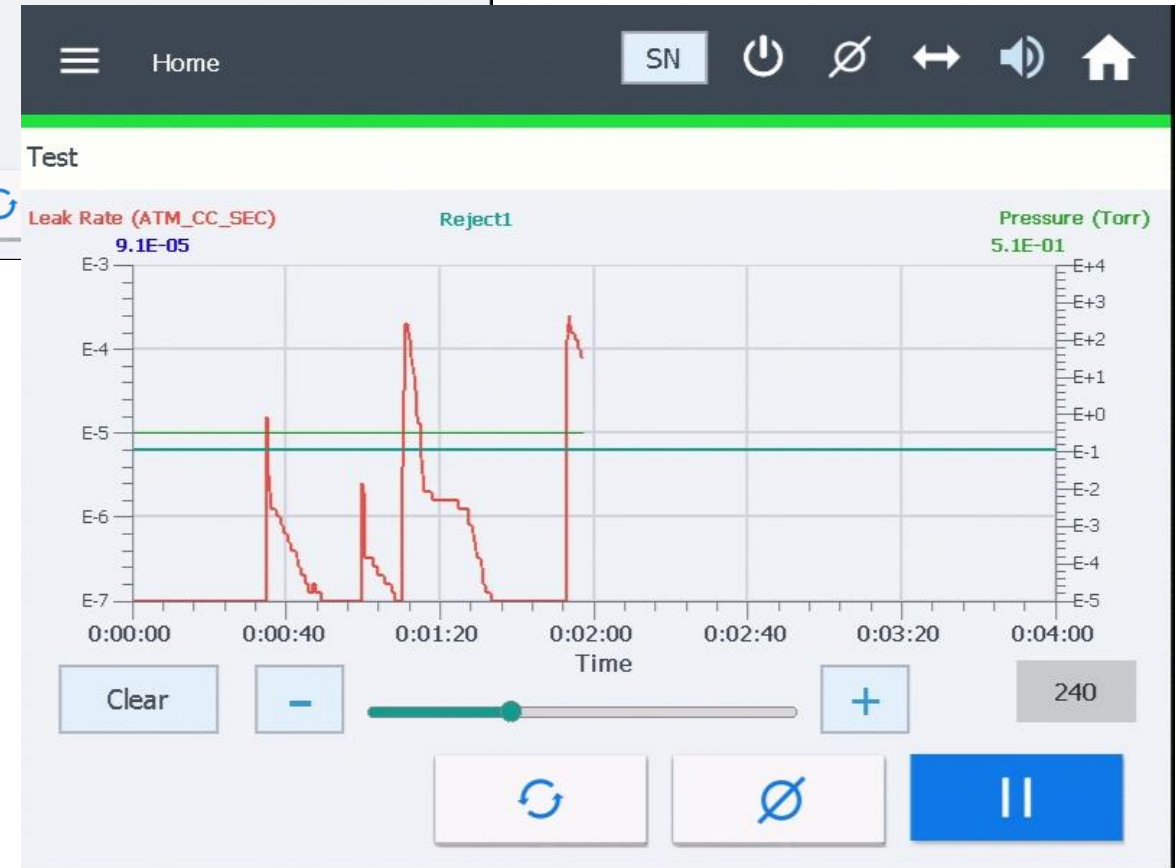
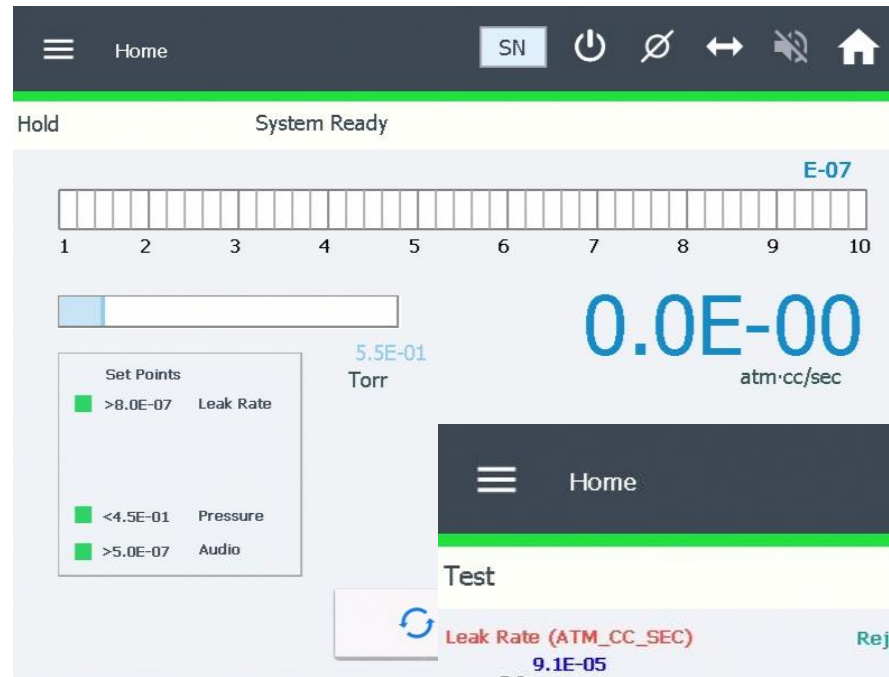
Single CPU architecture

Application setup guides the user
Ensures proper testing

Ability to save “recipes”

Covers six key applications:

- Sniffing
- Spray method
- High sensitivity
- Auto sequencer
- PPM testing
- Split flow



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Application Setups Summary

Users can save up to 3 versions of each application (18 total)

Saves time and frustration of recalling all parameters

Recalling an existing recipe takes ~9 taps

Equivalent setup on VS or competitive unit takes up to 4 times that

Once turned on, can easily return to the setup screen via the home page