

# Raptor

LEAK TESTING MADE SMART

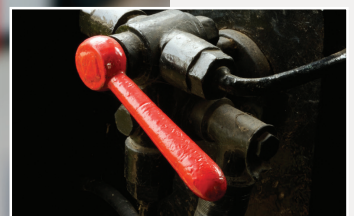


Uson



## IF YOU CAN CONCEIVE IT, WE CAN TEST IT.

It should come as no surprise that when Uson developed a new single-channel pressure decay tester, we'd do something special, something that would advance the industry. With its smart, revolutionary interface and Bluetooth technology, the Raptor sets a new standard by which future testers will be measured, making it the latest in a long line of Uson firsts.







# LEAK TESTING IN ITS PUREST FORM.

The Raptor calls to mind Uson's foundation, when we were establishing what would become the leak testing industry. When we addressed pressure decay like no one prior, developing the leak tester of the times. But Raptor isn't just any tester. It's not "old school." Not by a long shot. We've taken 50 years of experience, innovation and leadership and distilled it all into a single-channel tester armed with a beautiful color touch-screen interface and an independent HMI utilizing Bluetooth, all configured smartly in a compact footprint.



◀ The Raptor's user-friendly interface provides smart visual cues via the vivid, high resolution, color touch screen display.

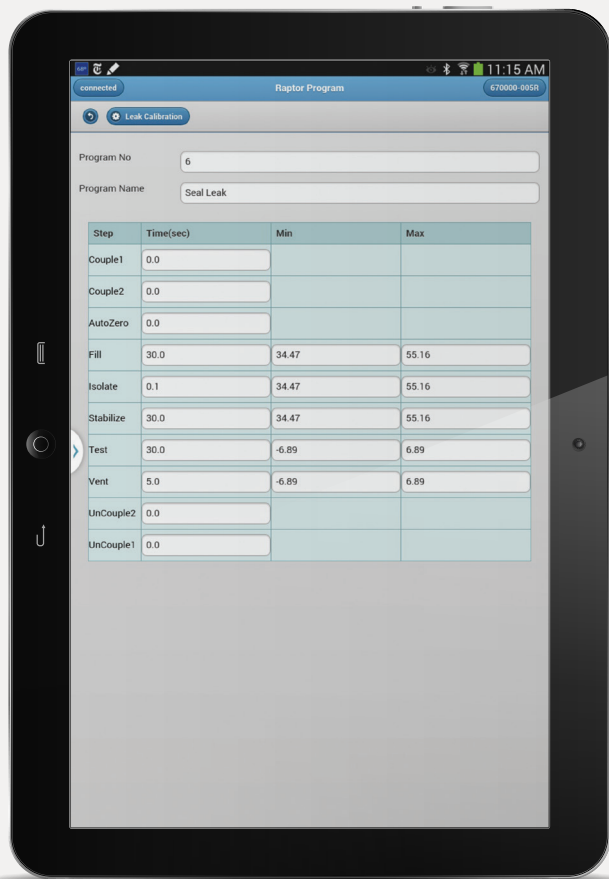
## **SMALL FOOTPRINT, BIG IMPRESSION**

The Raptor includes an update to our core test pneumatics. This version of the rugged duty, long-life Stallion™ manifold block helps reduce the overall footprint of Raptor while maintaining a 50,000,000-cycle lifespan.

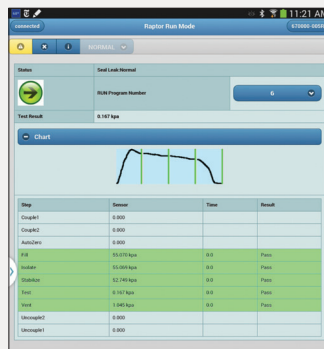
## **REVOLUTIONARY TESTER DISPLAY AND HMI**

Raptor utilizes an ARM processor and a Linux operating system with a high resolution color touch-screen interface. Programming and tester operation uses a revolutionary HMI

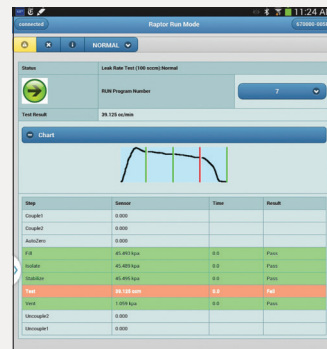




Primary program setup screen



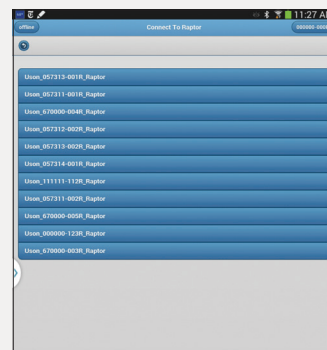
Completed "Pass" Test



Completed "Fail" Test



Configure engineering units



Smart device setup for use with multiple Raptor leak testers

Whether you're using the world's most installed mobile OS base, or you swear by the smart device that triggered a revolution in mobile communication, the Usen App allows for setup and monitoring on a smart device you use every day.

programmer via a Usen App installed on an Android or iOS device.

The tester's vibrant high resolution color touch screen provides the user visual cues, showing program execution information for:

- Step count down timers
- Pressure plot
- Step results
- Coupling outputs
- Current test pressure

Pass/Fail and the final test result values are displayed at completion of the test cycle, as well as an indication of where a test may have failed.

### FAST, REPEATABLE TESTING

Usen has held nothing back. The 24-bit A/D converter combined with our superior algorithms allow for fast and repeatable testing. All pneumatic components and sensors have undergone extensive performance and durability testing.

### 50 MILLION CYCLES

While the HMI may be trend-setting, the heart of any tester is the pressure sensor and pneumatics. Failure here puts your production at risk. That's why we utilize a valve leakage indicator and valves rated for 50,000,000 cycles.

### READY RIGHT OUT OF THE BOX

The Raptor series tester is ready for testing in Pressure Change Mode, COMP/CAL or Back Pressure Flow. The Raptor's 10 test programs give you flexibility for different part types, models and configurations.

### SPEED UP YOUR PROCESS

COMP/CAL mode allows you to speed up your test process using two calibration points. The first, COMP, teaches the tester the pressure change to expect for a non-leaking part. The second point, CAL, introduces a known leak standard to

**REGULATE**  
Precision manual  
regulator

**NETWORK**  
Ethernet port for connection to a  
network and remote data logging

**CONNECT**  
Log test results, export stored  
results, and perform software  
updates via Host USB 2.0

**CONTROL**  
Discrete I/O, eight inputs  
and five outputs

**POWER**  
24VDC via 100-240VAC  
50/60Hz (Auto Sensing &  
Switching) power supply



## Stallion™: Taking performance to new levels



The Uson Stallion™ manifold valve block, rated for 50 million cycles, provides best-in-class leak and flow testing capability and maximum reliability.

The new higher performance Stallion™ valve uses a standard configuration with a two-valve pressure decay or back pressure flow circuit.

Aside from the benefits of 50 years of experience, innovation and leadership that goes into every single product Uson makes, here's a shortlist of what makes Stallion™ so special.

- Self-cleaning valve design
- Rated leak-tight for millions of operations
- More uptime to keep production lines running longer
- Easier to service with no grease or custom-fitting of parts.

The best-in-class Uson Stallion™ manifold valve block assembly. Just another example of how Uson is raising the bar for the leak testing industry.

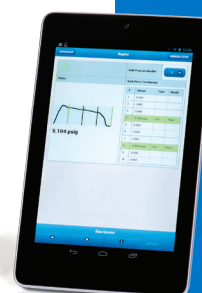
teach the tester the pressure change for a bad/failed part.

This two-point calibration has become known as COMP/CAL and, when combined with Uson's proprietary algorithms, provides a linear scale for the tester to determine pass/fail. It also lets the user monitor continuous process improvement.

### THE USON APP

The Uson App allows for quick and easy setup and lets you tune your Raptor leak tester for each unique application. Raptor pairs easily with smart Android or iOS devices via

Bluetooth, so programming, setup and data collection are performed using today's latest smartphone and tablet technologies.



◀ Operation and control of the world's first smart device leak tester is remarkably simple with the Uson App.

Download  
for Android  
or iOS today.





[www.uson.com](http://www.uson.com)

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### RAPTOR SPECIFICATIONS

#### Size

13"x8"x5.5" (330mm x 203mm x 140mm)

#### Weight

10.5 lbs. (4.8 kg)

#### Pneumatics

Integral or optional remote

<b>OPERATING SYSTEM</b>	Linux
<b>HMI OPERATING SYSTEM</b>	Google Android™ and Apple™ iOS
<b>TEST PRESSURE RANGES</b>	VAC / 1Bar / 2 Bar / 4 Bar 10Bar (Vacuum/15/30/60/150 PSI)
<b>RESOLUTION</b>	0.001 psi / 24bit A/D
<b>NO. OF CHANNELS</b>	One
<b>NO. OF PROGRAMS</b>	Ten
<b>COMMUNICATION</b>	Discrete I/O (8 Inputs / 5 Outputs)
<b>DATA COLLECTION</b>	USB / Ethernet / Bluetooth
<b>TESTING MODES</b>	COMP/CAL; Pressure Change; Back Pressure Flow
<b>OPTIONS</b>	HMI, Pendant, Bench Top Stand, Travel Case, LeakMaster
<b>SOFTWARE FEATURES</b>	Pressure Plot, Step Timers
<b>MANUFACTURING STANDARDS</b>	CE, WEEE, ISO 9001, ISO 17025

*Due to a program of continuous development, specifications may be changed without notice.*