Uson

for good measure

Optima<u>v</u>™



for good meas**u**re

Uson's experienced and knowledgeable engineers ensure each customer receives increased testing speed, sensitivity and repeatability. As a pioneer of automated leak detection equipment for the medical, automotive, pharmaceutical and packaging industries, Uson has more experience in these specialized fields than any other company in the world.

With the largest installed base of leak testers in the industrial, automotive and medical device industries, Uson builds leak detectors and accessories to exacting standards demanded by the world's leading manufacturers. This unrivaled experience and expertise is complemented by global sales and support.

Count on Uson for quality products and after-sales customer care.

solution



More flexibility, more capability, more technique.

Optima vT offers Uson's industry-leading reliability and advanced testing technology in a highly configurable and versatile package. A comprehensive user interface puts control and information directly at your fingertips via the large, clear, touch screen display.

Uson has set the standard for fast, reliable and repeatable leak testing when applications get tough and others turn away. The Optima vT provides a comprehensive link between the user and Uson's customizable pneumatics—the tangible result of over 40 years of application development and experience.

The most versatile leak tester.

Uson's engineering team has designed the Optima vT with utmost versatility in mind. Mounting options include standard and custom cabinets, flat panels, articulated pendants and more. Testing techniques include pressure decay, differential pressure decay, mass flow measurement, burst and occlusion testing and others.

At the heart of the Optima vT is Uson's powerful TCU2, the second generation Test Control Unit offering unparalleled flexibility in a single test channel. TCU2 allows up to four high resolution sensors and with its available custom pneumatic configurations, the sky is the limit on your leak and flow test design creativity. Incredibly, a single channel Optima vT tester can test up to four independent cavities simultaneously while the two channel tester can handle up to eight, allowing for significant cost advantages.

Like other Uson products, the Optima vT features a comprehensive software toolbox that enables users to quickly set up tests and communications. It even comes loaded with the most common test types—just add the information about your part and it will set up the test for you to fine tune.

acc racy

Versatility is what distinguishes the Optima vT from other leak and flow testers. Its advanced features offer increased flexibility for numerous applications.



OPTIMA vT



- 1.1 Large easy-to-read full color touch screen display
- $1.2\,$ Intuitive and easy-to-use interface makes set up and programming easy
- 1.3 Variety of installation options
- 1.4 Scroll and click menu navigation
- 1.5 TCU2 resource manager with advanced ARM processor w/ Vector floating point co-processor for fast data handling
- 1.6 Pop-up keyboard for easy increment/decrement of numerical parameters
- 1.7 Unix based software with a mini-ITX platform



1.1 Large touch screen display



1.2 Intuitive interface



1.3 Optional articulated mount



1.4 Easy navigation



1.5 Fast data handling



1.6 Pop-up keyboard



1.7 Mini-ITX platform

The new standard in versatility.

With a choice of one or two test channels, optional enclosures, a wide range of test types and custom pneumatics, the Optima vT takes versatility in leak testing to a new level.

For the most demanding applications, choose high flow valves for fast filling larger volumes, or specify Uson's proprietary differential pressure transducer for utmost sensitivity and repeatability. Even use two channels to test two cavities or parts simultaneously to reduce cycle time. With Optima vT, you're in charge.

Optima vT's flexibility means training is straight forward – whatever the test technique, the look, feel and menu structure are the same.

The powerful TCU2 resource manager with its state-of-the-art ARM processor communicates with the pneumatic hardware and user interface, directing real time information at your command. The TCU2 also processes the data for communication via the user interface through Fieldbus, COM port or LAN. E-mail alerts can be configured, if required, to alert the machine supervisor of control limit exceptions.

Optima vT is backed by Uson's solid reputation and our industry leading technical support and application know-how.

Examples of applications





Automotive components











Faucets Valves

If your product is designed to contain, transfer or keep at bay fluids of any kind, we can help you verify that it does.

Proven Testing Techniques

- Flow Mass, Differential, Laminar, Back Pressure, Continuous
- Pressure/Vacuum Decay Differential or Gage
- Occlusion
- Burst
- Cracking
- Pressure Rise
- Sealed Component
- Force Decay
- Volumetric
- Exercise/Fluff

Specifications

Model Series: Optima vT

Description: Configurable Leak and Flow Tester

Display: 15" diagonal color, touch-sensitive LCD

A/D Inputs: 1-8 24 bit resolution

Digital I/O: 16 24 VDC digital inputs expandable to 32

12 High current digital outputs expandable to 24

Communication: Profibus

Modbus

DeviceNet

EtherNet IP

RS-232

Email Alerts

Language: English, Spanish, *French, *Chinese, *Korean, *Japanese, *German

Test Programs: 199

Test Channels: Single or Dual Configurations

Concurrent Tests: Scalable to 8

HMI Dimensions: 10" x 14" x 5" (Without Enclosure)

Power Supply: 24 VDC (Optional Auto-switching 110 to 220 AC Power)

Pressure Range: Vacuum to 1,500 psig std.

Flow Range: 0 to 560 lpm std.

Smart Units: User selectable 15 flow and pressure units with two custom available

Calibration: Single Point

Dual Point (Comp & Cal)

Multipoint

Sensitivity: Down to 1 Pascal

Accuracy: +/- 0.25% Full Scale

Linearity: +/- 0.25% Full Scale

*Available upon request.



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