



Your Global Leak  
and Function Test  
Solution Experts

# Sentinel Blackbelt

LEAK AND FLOW TEST INSTRUMENTS



# Sentinel Blackbelt is the world's most versatile single-channel pressure decay and mass flow testing instrument

The Sentinel Blackbelt is a high-precision benchtop instrument providing unmatched flexibility in a proven, standard platform. It is configured to meet the requirements of your test: choose from a vast array of test types and options of one, two, three or four sequential test ports along with many other customizations. The Blackbelt can operate anything from single tests to multiple tests in a user-programmed sequence. Combined with its ability to control up to 8 tooling motions, one instrument can do the work of multiple testers and replace a PLC for a cost-effective approach to testing.



Custom CTS Blackbelt benchtop turnkey test system

## Test Types

Blackbelt offers the broadest range of test types in the Sentinel family. More than one test type can be performed by a single instrument!

- Pressure & Vacuum Decay Leak
- Differential Pressure & Vacuum Decay Leak
- Sealed Component Leak
- Blockage/Occlusion
- Mass Flow
- Volume Verification
- Part Pressure Verification
- Proof
- Burst
- Check Valve Cracking Pressure

For detailed specifications, see the **Sentinel Blackbelt datasheet**.

# The most functionality in a benchtop leak test instrument

The unbeatable performance and capabilities of the Blackbelt make it a top choice for leak testing in lab settings, testing disposable medical devices and for a range of other applications.

## Designed to deliver accurate, reliable, repeatable measurement

- Unrivaled measurement accuracy of 0.05% full-scale pressure and 0.5% full-scale mass flow.
- Absolute pressure transducers are sealed (liquid-tight), which negates the possibility of barometric pressure fluctuations affecting test results.
- Digital pressure correction compensates for inherent test pressure fluctuations and significantly improves measurement repeatability and reproducibility.

## Flexible and customizable to adapt to the needs of your production line

- Modular test manifold ensures repeatable internal test volumes from instrument and allows massive flexibility as user's needs change over time.
- Extensive list of test types available and the ability to have more than one type in a single instrument lets you get the most value from the system.
- Highly customizable to your test requirements: high pressure, low volume, high-flow/low pressure, controlled flow and many more.

## Multiple ways to export test data for process intelligence

- Telnet communication is included to transmit test data to a PC on your network.
- Use RS232 Serial communication to send test data locally to a nearby PC or PLC.
- Export test results to a USB for easy collection directly from the instrument front panel.
- For applications where you need to both command the instrument from a PC or PLC and collect test result data, the Blackbelt includes both EtherNet/IP and PROFINET, as well as Telnet and Serial communications.

## Easy to set up

- The patented Auto-Setup reduces process development effort.
- Remote test and instrument management from your computer with CTSnet LT software, included at no cost.
- The ability to control tooling motions can eliminate the need for PLC programming to simplify the full test set up.
- 24/7/365 no-charge phone support, regardless of whether your instrument is under warranty.

The Blackbelt can reduce the footprint, complexity and overall cost of your leak test. Learn more about the many features of the Blackbelt on the [product datasheet](#) or [contact us](#) to talk to one of our leak test experts about your test requirements.

## Manage your Blackbelt from your PC with free CTSnet LT software

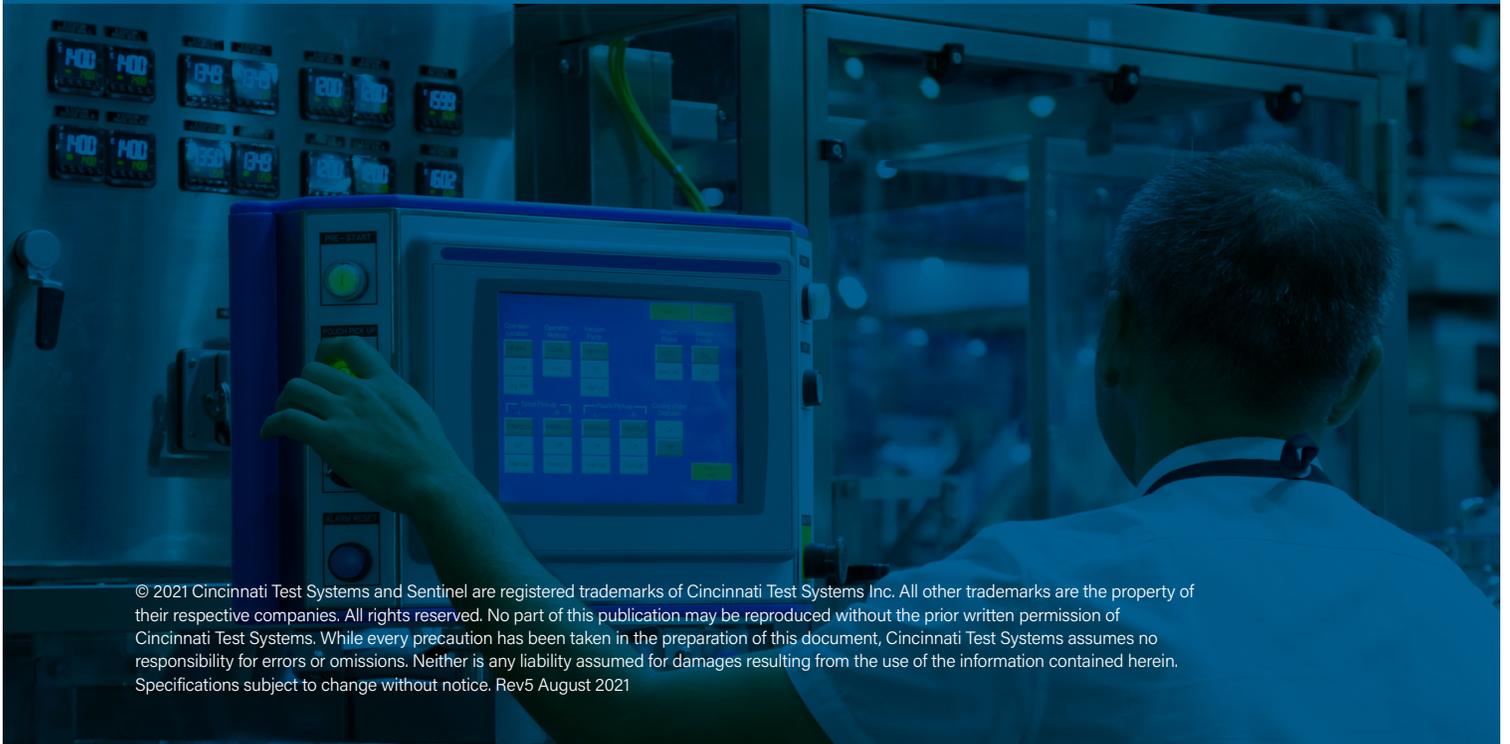
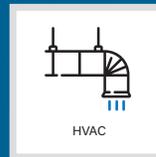
Monitor, control, and configure instruments, copy test programs, view waveforms and export reports, all from your PC!



## BETTER TOGETHER

CTS and innomatec are subsidiaries of the TASI Group, within TASI's Product Integrity Division. We are unified by the fact that we are "Better Together". Together, we deliver the broadest leak test portfolio in the industry. Together, we serve our customers through a global network of offices and partners. Together, we will harness the power of the Industrial Internet of Things and bring all of its potential to industrial companies worldwide.

## INDUSTRIES WE SPECIALIZE IN



### CINCINNATI TEST SYSTEMS

Corporate Headquarters  
10100 Progress Way,  
Harrison, OH 45030  
513.367.6699  
www.cincinnati-test.com

### INNOMATEC

Am Wörtgarten 14  
D-65510 Idstein / Taunus  
Germany  
+49 (0) 06126 / 95 98 66 - 800  
www.innomatec.com