



A new dimension of simplicity for dedicated leak test applications

Built on the same proven hardware architecture, control platform and intuitive user interface as the Sentinel X5-Series, the **Sentinel BC5 and IC5** deliver dependable leak test performance on a streamlined, purpose-built platform.

Each Sentinel BC5 or IC5 is configured for one test technology, giving you a purpose-built solution for your specific leak test application.

Choose the form factor that fits your application. Choose the test method that fits your testing requirements.

- Absolute pressure decay
- Differential pressure decay
- Mass flow

Get the core leak testing functionality you need in a straightforward, easy-to-implement package.



Sentinel BC5
(bench-top)

Sentinel IC5
(wall-mount)

Focused, efficient functionality

- Everything needed for core leak testing—without the extent of functions intended for more complex or diverse applications.

Intuitive fifth-generation user interface

- The latest CTS platform combines a familiar user experience with simplified and graphically enhanced access to test status, results, setup parameters, and statistical information associated with the Sentinel 5-Series.

Simple migration from other CTS devices

- Designed as the successors to the Sentinel LPC 528 and C28WE, providing an intentional transition to modern 5-Series architecture.

Proven leak test performance

- Precision measurement technologies and established Sentinel architecture provide the accuracy, repeatability, and reliability expected from a dedicated leak test instrument.

Multiple stored test programs

- Conveniently store and access unique test programs tailored for differing part test requirements while keeping operation straightforward.

Ready for integration

- Built-in network and serial communications, as well as the industry's two most prevalent PLC protocols, make the Sentinel BC5 and IC5 ideally suited for integrated test stations where tooling movements and process sequencing are managed externally.

Purpose-built for your test

The core functionality you need, focused on your test essentials

Not every leak test application needs extensive test sequence management, instrument-driven tooling control or multiple test technologies in one instrument. The Sentinel BC5 and IC5 focus on the essentials: configure the test, run the test, evaluate and communicate the result.

That makes these models an ideal choice for singular test and technology applications and integrated test stations where the PLC or other systems control the seals, tooling/fixture motions, and overall process sequence.

One platform. Two form factors.



Sentinel BC5

Bench / horizontal mount

A flexible configuration for manual or automated setups, particularly when integrating multiple instruments.

For either configuration, if needed, an external PLC or other control method can be used to manage seals, tooling/fixture motions and functions, as well as multi-test sequencing, while the Sentinel BC5 or IC5 focus on the leak test itself. See product datasheets for details on integration, and more.



Sentinel IC5

Wall / vertical mount

A versatile configuration designed for overhead mounting on automated or manual test stations.

The Sentinel BC5 and IC5 can be used for a broad range of applications



Automotive



Consumer electronics



Medical



Military and defense



Appliances and consumer goods



Energy



HVAC/R



eMobility



Other transportation

Designed for your specific connectivity needs

Both Sentinel BC5 and Sentinel IC5 provide:

- Integral EtherNet/IP™ and PROFINET PLC protocols
- Serial and network bi-directional communication
- Configurable digital I/O
- Barcode scanner compatibility
- Multiple stored test programs
- Unique user accounts
- CTSnet remote PC interface software

See the Sentinel BC5 and IC5 datasheets for the full list of features and specifications.



The right test method for your application

Each instrument is ordered as one dedicated test technology; absolute pressure decay, differential pressure decay, or mass flow. Multiple test types support both leak and blockage testing. See datasheets for details.

1

ABSOLUTE PRESSURE DECAY

Measures pressure loss using an absolute pressure transducer referenced to a sealed vacuum rather than atmosphere. This minimizes the effects of barometric pressure changes, improving measurement accuracy and repeatability.

2

DIFFERENTIAL PRESSURE DECAY

Measures pressure loss by comparing the part test pressure to the isolated test pressure of a sealed reference volume. This provides excellent repeatability for very small leak thresholds, particularly in larger-volume parts or applications requiring high leak detection sensitivity. CTS piezoresistive transducers provide high resolution with minimal drift, improving measurement accuracy and repeatability.

3

MASS FLOW

Measures the airflow required to maintain test pressure using a precision thermal mass flow transducer. Since the measurement directly reflects air leaving the part, it is independent of part volume—making it well suited for testing families of similar parts with different volumes against flow-based criteria.

Discover the advantages of the Sentinel 5-Series

The Sentinel BC5 and IC5 extend the Sentinel 5-Series portfolio, providing additional options for configuring leak test systems to suit specific application and installation requirements.



Sentinel BC5



Sentinel IX5



Sentinel IC5

Proven architecture

- The Sentinel BC5 and IC5 share the proven hardware architecture and control platform of the Sentinel X5-Series, creating commonality in usage across instruments.

Simplified implementation

- Focused functionality helps reduce unnecessary configuration and eases incorporation into your test processes.

Consistent user experience

- A common fifth-generation Sentinel interface helps streamline training, operation and support.

Built for integration

- Network and serial communications, EtherNet/IP & PROFINET PLC protocols, digital I/O and barcode connectivity make it easy to connect the leak tester to the surrounding process.

Expand when you need to

- Optional plug-and-play Enhanced Fill, External Exhaust, and Diverter Valve accessories, provide additional capability when the application calls for it.

Built for the next generation

- The Sentinel BC5 and IC5 bring the latest 5-Series architecture to all users, with an upgraded yet structured transition from comparable Sentinel legacy instruments.

Built for the future of leak testing. Backed by Legacy.

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