



Sentinel I28[®]

Leak and Flow
Test Instrument

EtherNet/IP
Communications
Inside



Providing world-class leak test and assembly verification solutions to industries around the globe.

Sentinel I28®

The World's Most Advanced Multi-Functional Leak Test Instrument

The Sentinel I28® is the world's most advanced multi-functional test instrument on the market. The I28 features a standard manifold design tested with over 40,000,000 cycles. CTS pairs this manifold with a new high performance transducer that reduces test cycle and improves accuracy and repeatability. The I28 provides the broadest range of flow and leak test types for general industrial applications – mass flow, occlusion (blockage), pressure and vacuum decay, volumetric fill, burst, rate of change, test to event, and more – delivering high performance and reliability!

Why is the I28 our most popular control?

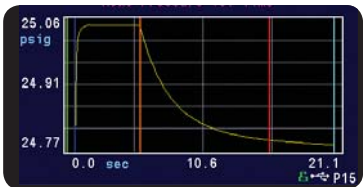
Multi-technology • Superior performance • Less complex • Global friendly • Low maintenance • Compact



Selectable language interface



New external connectivity panel



High resolution graphic display

Multi-Technology

- Configurable program linking
- Embed parent/child programming
- Programmable tooling I/O control
- Pressure testing
- Vacuum testing
- Flow testing

Superior Performance

- Pressure resolution 0.000001
- Powerful 32-bit processor
- 24 bit A/D converter
- Optimized pneumatic manifolds
- Flow meter sized to the application
- Environmental drift correction

Less Complex and Compact Design

- Patented "auto setup" easy programming
- Quik test - reduced test time
- Flow and leak testing auto calibration
- Modular pneumatic and control packages
- 12" W x 9.25" H x 8.75" D cabinet

Global Friendly

- Language neutral operator interface
- Multi-language – software selectable
 - English, Spanish, Portuguese, Chinese and Korean
- Smart voltage selection
- International power cable included
- Color graphs



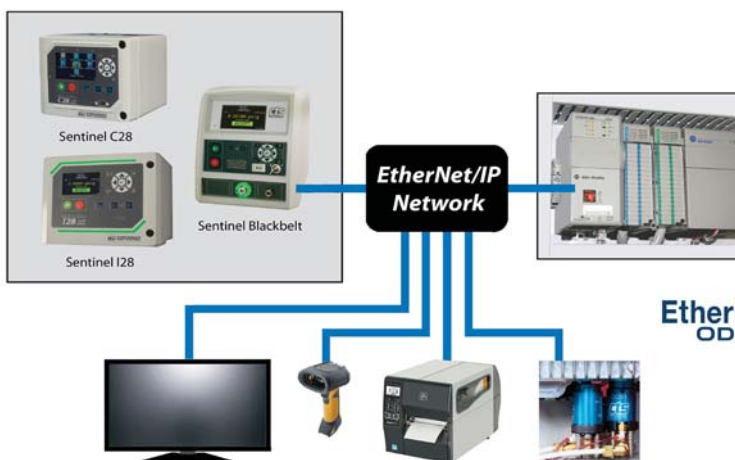
Low Maintenance

- Reduced wear – long life valves/manifolds
- Modular design for easy maintenance
- Internal leak standards
- External I/O indicator status lights
- External connectivity
- 40 million cycle valve manifolds

EtherNet/IP™ Communication

- Leak and flow system integration made easy
 - RJ45 interface connection
 - Reduces installation time
 - Simple 'plug-and-play' integration to PLC
- Provides more I/O
 - 26 inputs / 25 outputs
- CTS EtherNet/IP is ODVA Conformance Tested for flawless operation and verified data exchange

Typical CTS EtherNet/IP Network Interface



EtherNet/IP
ODVA

Available Test Types

- Pressure or vacuum decay - ΔP
- Pressure or vacuum decay - $\Delta P / \Delta T$
- Pressure or vacuum decay - leak std
- Pressure or vacuum occlusion
- Pressure or vacuum mass flow
- Mass flow pressure - continuous flow
- Mass flow pressure - leak std
- Differential pressure mass flow
- Pressure or vacuum burst
- Pressure or vacuum proof
- Ramp to pressure event
- Ramp to flow event
- Volumetric fill
- Differential pressure decay - ΔP
- Differential pressure decay - leak std

Product Enhancements

- High contrast 24 bit color TFT display
- XY Graphing (pressure, loss, or flow)
- Illuminated test status bars
- Enhanced mass flow performance
- Flow ranges from 0-15 sL/min @100 psig
- Low flow manifold (0.7 cc manifold volume)
- Multi-point calibration on electronic regulators



REJECT



IN TEST

View of the I28 instrument showing the system test status lights; Accept (green bars), Reject, and In Test.



Modular control unit



CTS independent and semi-automat four-station I28 turnkey test system designed to perform volumetric fill with pressure decay leak testing on sealed parts.

Advanced Features

- Data storage to 40,000 events, expandable with USB memory stick
- 12 inputs/12 outputs with five programmable tooling motions
- Digital input feedback verifies motion
- Test pressure accuracy, 0.05% uncertainty full scale (supplied with calibration certificate)
- Test air flow accuracy, 0.5% uncertainty full scale (supplied with calibration certificate)
- Flow and leak auto calibration
 - Characterizes the pressurization effects and geometric dynamics of the master part along with a NIST traceable leak standard to assure accuracy from zero to the specified leak limit.
- RS232 and EtherNet communication ports
- EtherNet/IP™ communication
- Test program selection
- Barcode unique part identification
- Email of reports, test data, and alerts
- Test result data transmission with definable fields



Providing world-class leak test and assembly verification solutions to industries around the globe.



Other Sentinel Test Instruments and CTS Products



TracerMate CS

The Sentinel TracerMate CS is a precision benchtop or wall mount Tracer Gas, Evacuate and Charge instrument designed for maximum performance and minimal space.



C20WE

The Sentinel C20 World Edition is a low cost, high-performance, pressure decay leak test instrument that integrates easily into production lines for many applications.



C28WE and C28DP

The Sentinel C28 World Edition is designed with additional options, I/O capabilities, and test parameters beyond the C20WE. The C28DP provides differential pressure decay testing up to 200 psig.



Blackbelt Benchtop

The Sentinel Blackbelt is designed to medical industry standards, providing up to 4 test port, sequential testing, and configurable with a broad range of pressure and vacuum tests.



Blackbelt Pro

The Sentinel Blackbelt Pro is our 'next generation' of multi-port/multi-channel instrumentation. It can manage and simultaneously execute 4 part tests under the control of one Blackbelt Pro instrument.



Specialized Instrumentation

For those special application, CTS offers custom test solutions with capabilities exceeding standard instruments. Call the CTS Products Group to discuss your special testing needs.

CTS Connect®

CTS offers a standard line of pneumatic connectors, manual connectors, and luer connectors, as well as custom seals. Our line of connectors and custom seals are designed for ease of use, longevity, and reliability.



Corporate Office

Cincinnati Test Systems
10100 Progress Way
Harrison, OH 45030
(513) 367-6699
Fax: (513) 367-5426
www.cincinnati-test.com

Korea

Cincinnati Test Systems Korea Inc.
104-1110, SK Ventium, #522 Dangjeong-dong
Gunpo-si, Gyeonggi-do, 435-776 Korea
+82-070-7501-7743
Fax: 82-31-624-4743

China

Cincinnati Test Systems
Dongfang Road 3601
Harvest Industrial Park No. 7 Building
Room 403
Pudong, Shanghai, China 200125
+86 +21 58366290
Fax: 96-21-58366290



Scan to view our web site

I28 is a registered trademark of Cincinnati Test Systems Inc.
©2016 Cincinnati Test Systems Inc.
Printed in U.S.A. Rev. 1



Visit our website: www.cincinnati-test.com