









CETATEST 825 - New generation of innovative leak testers with differential pressure sensor

The CETATEST 825 is the fourth generation of CETA differential pressure testers, as a variant of the new series of test devices CETATEST x25. Following the x15 series, known for the quality, reliability and durability of its devices, the new x25 series features a large number of technical innovations.

System architecture

Industrial PC: Quad Core CPU, 1.8 GHz, 4 GB RAM, 128 GB SSD, Micro-controller system for the test process control: 32-bit ARM μ C / 84 MHz

Signal processing

Fast 24-bit A/D converter, real-time processing of measurement signals

Valve types

Sliding valve or poppet valve (depending on the application)

System features

Flow-optimised pneumatics Low inherent volume of the measuring circuit Integrated security functions Flexible configuration of test phases

External sensors can be integrated

Pressure sensors

Gauge pressure sensor Differential pressure sensor

Measurement ranges

 \pm 500 Pa / \pm 5,000 Pa (display resolution: 0.1 Pa, internal resolution: effectively 0.01 Pa), other ranges on request

Result units

Pa, hPa, PSI, Pa/s, hPa/s, mbar • I/s, ml/min, ml/h, I/min, I/h, mmHg, mmWs, Torr

Pressure ranges

-1 bar, +/- 5 mbar, +/- 50 mbar, 200 mbar, 1 bar, 6 bar, 10 bar, 20 bar, 30 bar negative and positive gauge pressure ranges can be combined (e.g. -1 bar / +10 bar), other pressure ranges on request

Maximum Deviations

Gauge pressure: 1 % *
Specification for combined devices based on positive gauge pressure
Differential pressure: 0.5 % referred to measuring range

Test modes

Pressure decay

Optional: sealed component, dynamic pressure, pressure steps, pressure rise

Additional functions

Standard: prefill, pulsing, smooth filling, variable zero point

Optional: program series, temperature compensation, test repetition, automatic test time adjustment, free programmable control valves

Operation

Touch screen, dual jog dial, separate start / stop buttons, password protected user levels

Display

7-inch color screen, various graphical diagrams (measurement curves, histogram, measurement series overview), list of results

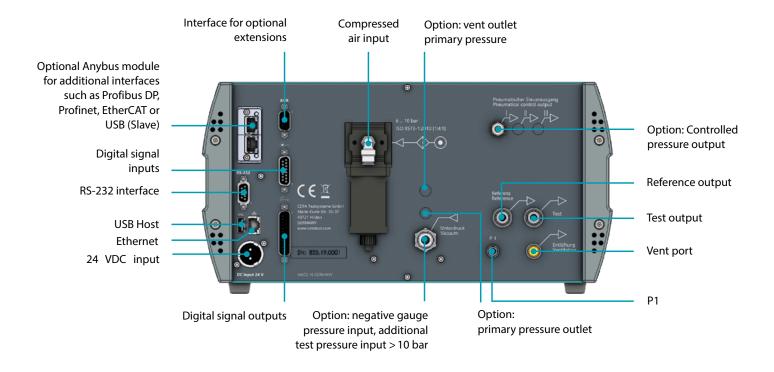
System monitoring

Self-tightness test, logging of valve switching times, Still-Alive-Check with differential pressure sensor monitoring, automatic function control (option), control of the compressed air supply, consecutive zero results

Memory

For more than 1 million measurement results, 256 individually parameterizable test programs with alpha-numeric program names, export / import of test programs via device interfaces or by usage of a USB storage device





Interfaces

I/O interface for start/stop/reset, program selection, device status, system errors, test results (pass/fail)

RS-232, USB (host), Ethernet and optional interfaces allow additional functions like parameterisation, measurement results, detailed information in real time (e. g. measurement curve), failure messages

An optional Anybus module can be used to implement additional interfaces such as Profibus DP, Profinet, EtherCAT or USB (Slave).

The CETATEST 825 is fully interface compatible with the CETATEST 815 and well prepared for Industry 4.0 requirements.

Further functions

Result statistics, cycle counter, recording of measurement series and measurement curves, Dynamic Link Library (DLL) for RS-232 interface programming, integration of test part image / barcode / QR code, user administration, export of test parameters, measurement curves and measurement series to USB storage media, nominal pressure optimization

User support

Automatic parameter determination Leak rate set-up wizard Teach-in mode Maintenance monitoring Overview of parameter changes

Power supply / Power consumption

Test device: 24 VDC / max. 50 W External power supply (optional): Input 100 - 240 VAC / 47 - 63 Hz Output 24 VDC

Air supply

6 - 10 bar, min. 0.5 bar above test pressure resp. 50 mbar below evacuation pressure Test devices with pressure ranges higher than 10 bar have an additional connection for the external compressed air > 10 bar. Quality or purity according to ISO 8573-1: 2010 [1: 4: 1]

Pneumatic connections

Input (compressed air supply): 6 mm plug-in fitting Port for test part: 6 x 1 mm fitting, 6 mm clamping ring (option), up to three pneumatically driven outputs (option)

DAkkS calibration and DAkkS certificate

All new devices will be delivered free of charge with DAkkS calibration certificate according to DIN EN ISO/IEC 17025.

Dimensions and weight

W x H x D: 367 mm x 183 mm (4 U) x 435 mm Weight: approx. 12,5 kg $\,$

Scope of delivery

Special packaging, documentation on device, DAkkS calibration certificate, EU declaration of conformity, D-Sub-plug, digital input and output cable, spare sealing caps and spare caps for union nuts coupling or spare clamp rings

Warranty

3 years in case of yearly maintenance, optional prolongation to 5 years

Accessories (optional)

Power supply, power cord, filter combination, test leak, leaktight 3/2-way valve, application software CETA Soft 2G available on request free of charge, scanner interface, further accessories in the CETA accessories catalogue