CETA®

**Application Software
CETA Soft 2G for free!**

DKD   ilac-MRA   (((DAkkS
Deutsche
Akkreditierungsstelle
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Leak Tester CETATEST 515 - *available in three different types*

The CETATEST 515 with differential pressure sensor is a full automatically working leak tester for the detection of untight parts within the cycle time of the production process. The leak tester is available in three different types:

1 The configuration "*closed components - high resolution*" can be used for test parts which cannot be filled, so called "closed components". It is possible to detect very small ratios of test part volumes (0.03 ml < ΔV < 1.0 ml).

2 The type "*pressure decay - high speed*" can be used for leak tests of very small test parts in high speed production cycles.

3 The configuration "*pressure rise*" has a 50 % larger measurement signal (compared to the CETATEST 815).

Operating methods
One channel operation

Signal processing
Fast 24-bit-A/D-Converter
Real-time processing of the measurement signals

Pneumatic
Minimized volume to optimise the resolution

Processing
Real time microcontroller system, 16-bit µC / 40 MHz

Pressure sensors
Differential pressure sensor, gauge pressure sensor

Measurement ranges
± 500 Pa / ± 5,000 Pa
(displayed resolution: 1 Pa, internal resolution: effective 0.01 Pa), other ranges on request

Result units
Pa, hPa, PSI, Pa/s, hPa/s, mbar*l/s, ml/min, ml/h, l/min, l/h, mmHg, mmWs, Torr

Pressure ranges
-1,000 mbar, 200 mbar, 1,000 mbar, 6 bar, negative and positive gauge pressure ranges can be combined
(e.g. -1 bar/+1 bar),
other pressure ranges and mechanical pressure regulator on request

Test modes
Pressure decay,
"closed component – high resolution", pressure decay - "high speed", pressure rise

Test options
Prefill, program series, smooth filling, repeated filling, temperature compensation, variable zero point, test repetition / automatic test time adjustment, free programmable control valves

System control
Still-Alive-Check with differential pressure sensor control, patented automatic function control (option), control of the compressed air supply, consecutive zero results.

Programmable test phases
Delay, filling, stabilising, measuring, venting, reservoir filling, flooding, refilling
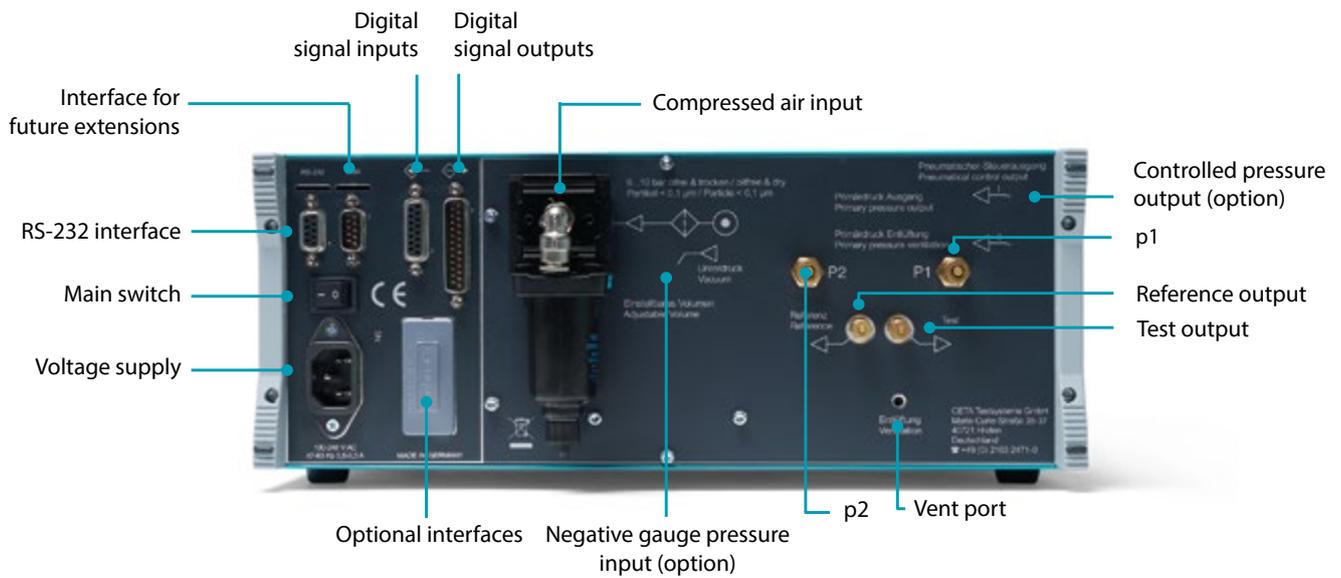
Test mode specific limits
Prefill pressure, filling pressure, test part specific reject and rework levels

Handling
Intuitive menu, password protected user levels

Parameter memory
64 individually parameterizable test programs with alpha-numeric program names, parameters of the test programs can be exported resp. imported via the test device interfaces or by usage of a USB storage device.

Digital signal inputs

Digital signal outputs

Interface for future extensions

Compressed air input

RS-232 interface

Controlled pressure output (option)

p1

Main switch

Reference output

Voltage supply

Test output

Optional interfaces

Negative gauge pressure input (option)

p2

Vent port

Interfaces

Function	Start / Stop / Reset	Program selection	Device status / system fault	Evaluation (Pass / Fail)	Parameterization	Measurement results	Detailed fault messages
Digital I/O (standard)	■	■	■	■			
RS-232 (standard)	■	■	■	■	■	■	■
Profibus DP (option)	■	■	■	■	■	■	■
Profinet (option)	■	■	■	■	■	■	■
Ethernet (option)	■	■	■	■	■	■	■
EtherCAT (option)	■	■	■	■	■	■	■

Further interfaces on request. The optional RS-232 protocol converter enables the exchange of a CETATEST 510 that communicates via RS-232, against a CETATEST 515.

Further functions

Result statistics, indicator for service intervals, registration of parameter change, recording of measurement series and measurement curves, Dynamic Link Library (DLL) for RS-232 interface programming

Power supply and power consumption

100 - 240 V AC, 47 – 63 Hz, 0.6 - 0.3 A, depending on stage of expansion max. 60 W

Compressed air supply

6 - 10 bar and 0.5 bar above test pressure resp. 50 mbar under evacuation pressure (ISO 8573-1:2010 [1:4:1])

Pneumatic connections

Input (compressed air supply):
6 mm plug-in fitting

Port for test part: 3 mm clamping ring
Up to three pneumatically controlled outputs

Dimensions and weight

W x H x D: 345 mm x 145 mm(3U) x 435 mm
Weight: ca. 10 kg

Scope of delivery

Special packaging, power cord, documentation and PC-software on CD, calibration certificate, declaration of conformity, D-Sub-plug including cable for inputs and outputs (PLC-communication), spare sealing caps and spare caps for union nuts coupling or spare clamp rings

DAkkS calibration and DAkkS calibration certificate

All new CETATEST 515 devices will be delivered free of charge with DAkkS calibration certificate according to DIN EN ISO/IEC 17025.

Warranty

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

Accessories (optional)

Filter combination, leak test, leaktight 3/2-way valve, RS-232 protocoll converter, application software CETA Soft 2G, scanner interface, more in the CETA accessories catalogue.