ZEDbase+

The ZEDbase+ is the further development of the ZEDbase device series with a new selection of intelligent standard additional functions. This allows you to easily adapt the leak test system to your individual test requirements. Thanks to the intuitive user interface with many standard functions, the device is easy to set up and operate. The ZEDbase+ is the basis for the ZEDcore, which can be used in combination with the relative pressure, differential pressure, dynamic pressure, mass flow and flow rate measurement methods in different pressure ranges.

TYPICAL APPLICATIONS

+ **Automotive:** Complete engines, cylinder heads, transmissions, heat exchangers, control electronics, batteries, pipes, valves, fuel cells, pumps, etc.
+ **Medical technology:** catheters, dialysis filters / boxes, flushing systems, tubing systems, secretion containers, syringes, respirator devices, etc.
+ **Packaging / cosmetics:** dosing pumps, plastic bottles, cartridges, etc.
+ **Domestic appliances:** water diverters, water pumps, gas valves / fittings, stoves, compressors, etc.
+ **General industry:** cylinders, safety / check valves, couplings, grippers, ball valves, seals, etc.

Accessories (optional):

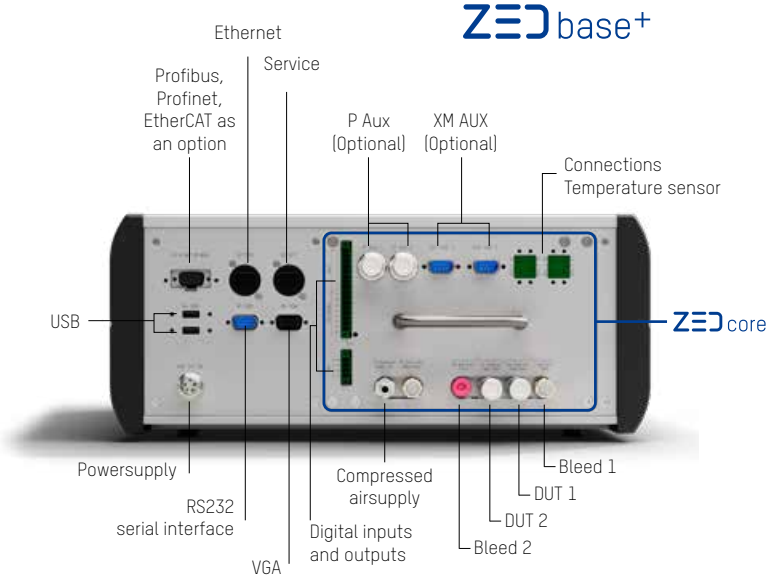
+ Test leak
+ Leak calibrator
+ Barcode / data matrix scanner
+ Keyboard

MEASUREMENT METHODS

In combination with the ZEDcore, the following measurement methods can be performed:

RD	Relative pressure (optional: 2-channel)
RD / GP	Relative pressure with bell testing
RD / iDF	Relative pressure with indirect flow
RD / DF	Relative pressure with flow
DD	Differential pressure
DD / GP	Differential pressure with bell test
SD	Dynamic pressure
MF	Mass flow

(for available pressure ranges, see technical data)



Product features:

- PC-based control with powerful multi-core CPU and Windows 10 IoT Enterprise
- 7" TFT colour display with capacitive touch screen
- Graphical representation of the measurement process
- Data storage > 1,000,000 test results
- > 1,000 freely configurable test programs
- Self-test function
- Statistics function
- Automatic test pressure monitoring
- Electronic pressure regulator
- Leak simulation connection for connecting a test leak or leak calibrator
- Sequential tests / parallel tests
- Automatic volume determination with a test leak
- Control of ZEDsatellite

Control options:

PROFIBUS/PROFINET/ETHERCAT*	
Ethernet (Modbus, WebAPI, OPC-UA)	Modbus, barcode control
8 freely configurable inputs and outputs. Optionally expandable	

Interfaces:

- **VGA port:** for connecting an external monitor
- **USB and Ethernet interface:** e.g., for data export to CSV, XML
- **RS232 interface:** e.g., for the leak calibrator
- **Dimensions:** (H x W x D): 170 x 398 x 410 mm
- **Weight:** 9.9 kg without a power supply
- **Power supply:** 230 VAC, internal 24 VDC (+10 / -5 %) 5 A
- **Test medium ZEDcore:** Compressed air (oil and anhydrous according to ISO 8573-1 class 3)
- **Media/ambient temperature:** 50 ... 104°F / 10 ... 40°C
- **Rated power:** 25 ... 75 W

*optional

Technical specifications:	ZEDcore Relative pressure	ZEDcore Differential pressure	ZEDcore Dynamic pressure	ZEDcore Mass flow	ZEDcore Flow
Test pressure range (several gradations possible)	Negative pressure* -0.9 bar - Overpressure 20 bar**		0 ... 6 bar**	Negative pressure* -0.9 bar - Overpressure 16 bar**	
Test pressure accuracy	1.0 % v. E.	1.0 % v. E.	1.0 % v. E.	1.0 % v. E.	
Measuring range	as test pressure range	-100 ... 100 mbar	10,000 ... 450,000 ccm/min | ml/min	-50 ... 50 or -250 ... 250 ccm/min | ml/min	up to 250,000 ccm/min | ml/min
Measurement resolution			0.5 ppm v. E.		
Smallest measurable pressurechange (type-specific)	0.5 Pa (1 bar) ... 4 Pa (20 bar)	0.1 Pa	0.1 Pa (50 mbar) ... 1.5 Pa (6 bar)		
Measurement accuracy (leak rate)	depending on the test setup		depending on the test setup	Typically 5 % v. M. not less than 0.5 % v. E.	
Repeatability	depending on the test setup		depending on the test setup	< 0.5 % v. M. not less than 0.05 % v. E. (depending on the test setup)	

Further accuracies, test pressures, control options, customer-specific protocols for higher-level data acquisition and evaluation systems on request.

* Depending on the source of negative pressure
** Recommended working pressure range: 10–95% FS

ZELTWANGER Leaktesting & Automation GmbH
Maltschachstr. 32 | 72144 Dusslingen | Germany
+49 7072 92897-501 | office.lta@zeltwanger.de | www.zeltwanger.com