

ZEDcore

The heart of the ZED device family, the ZEDcore measuring module, can be integrated into all ZELTWANGER measuring devices (except ZEDeco) in plug-and-play mode without complicated installation. This modularity means, measuring circuits can be changed quickly due to the flexibility of the ZEDcore. This can be accomplished in one device or a measuring module that can be used across different devices.

TYPICAL APPLICATIONS

- + **Automotive:** Engines, cylinder heads, transmission, diaphragms, hybrid drives, 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 valves, check valves, couplings, grippers, ball valves, seals, throttle adjustment studs, etc.

Accessories (optional):

- + External bleed valve
- + Temperature compensation
- + External pressure feedback
- + Test leak valve
- + Self-test valve
- + Pressure increase
- + Vacuum pump
- + Filling bypass valve
- + Reference volume
(measuring methods DD and MF)

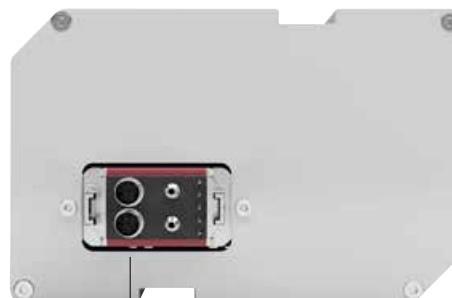
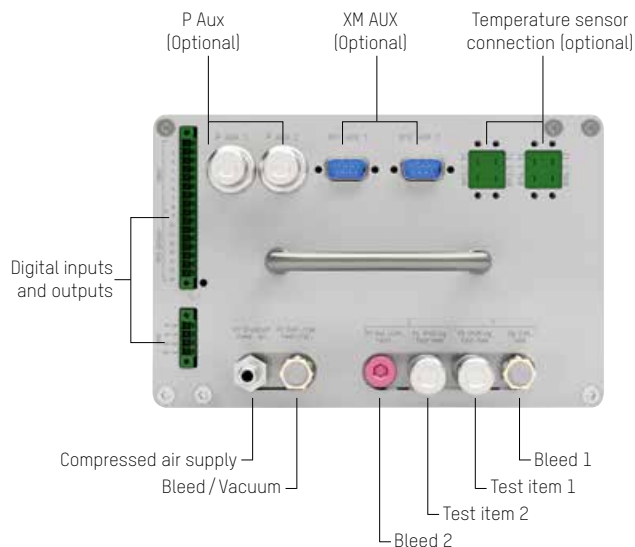
MEASUREMENT METHODS

- 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)

On request, all installed pressure sensors can be supplied directly by ZELTWANGER in accordance with **DIN EN ISO/IEC 17025** with a **calibration certificate** and **accreditation symbol**.





Control panel:

Expansion and combination options		
ZEDbox	1 external + 1 external	max. 2 channels
ZEDbase*	1 internal + 1 external	max. 2 channels
ZEDmod	internal external	max. 8 channels
ZEDcontrol	internal external	max. 8 channels

Interfaces:

Auxiliary (optional, e.g. for external bleeding)

Temperature sensor

Interface to the control panel

Dimensions (HxWxT): 130 x 200 x 350 mm

Weight:

ZEDcore RD: approx. 6.2 kg
 ZEDcore RD 2K: approx. 7.6 kg
 ZEDcore RD GP: approx. 7.3 kg
 ZEDcore RD/iDF: approx. 6.4 kg
 ZEDcore RD/DF: approx. 6.4 kg

Dimensions: 24 VDC (+10 / -5%) 5A

Test medium: Compressed air
 (oil and anhydrous according to ISO 8573-1 class 3)

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	like 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 pressure change (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