

ZED satellite

The decentralized measurement and test module ZEDsatellite enables measurement directly on the test object and thus increases measurement accuracy and reliability. The data from the available measurement methods can be conveniently read out centrally via the ZEDbox or any other unit of the ZED family with the exception of the ZEDeco+. Distances to the evaluation unit of up to 50 m are possible.

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, etc.

Accessories (optional):

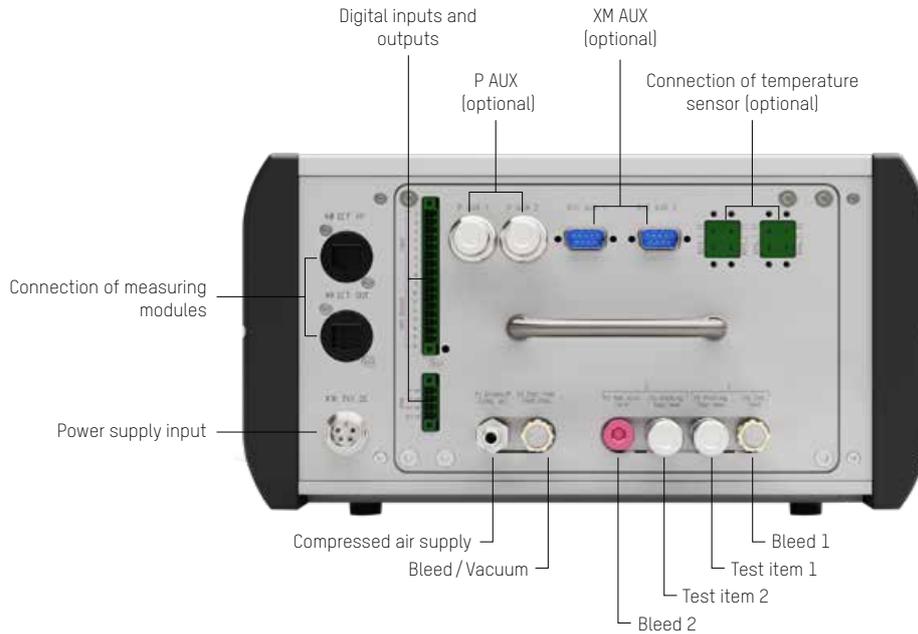
- + Test leak
- + Leak calibrator

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)





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 |

Interfaces:

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|--|
| Connection to other measuring modules |
| Other interfaces are part of the ZEDcore measurement module |
| Interface to the control panel |
| Dimensions (H x W x D): 170 x 310 x 430 mm |
| Weight: 7.5 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) |

| Technical specifications: | ZEDcore Relative pressure | ZEDcore Differential pressure | ZEDcore Dynamic pressure | ZEDcore Mass flow | ZEDcore Flow |
|--|--|-------------------------------|---|---|---------------------------------------|
| Test pressure range <small>(several gradations possible)</small> | 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