



# **Z=D** core

The heart of the ZED family – the ZEDcore measuring module – can be integrated into all ZELTWANGER measuring devices (except ZEDeco) and is easy to install with plug-and-play. Due to the modular design, measuring circuits in a device can be flexibly and quickly swapped out, or the measuring modules can be used in different devices.

## ${\bf Measurement\ methods:}$

RD Gauge pressure (2 channels optional)

RD/GP Gauge pressure with bell testing

RD / DF Gauge pressure with flow

DD Differential pressure

SD Stagnation Pressure

MF Mass flow

(Please refer to the technical data for possible pressure ranges)

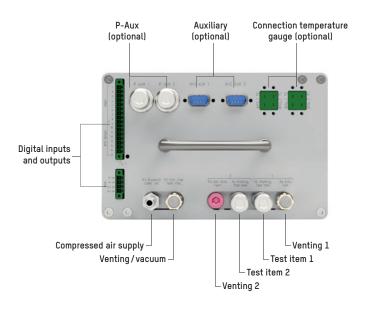
### Application examples:

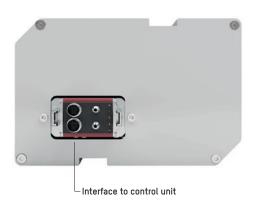
- Automotive: engines, cylinder heads, transmissions, diaphragms, additional main devices, power adapters, hybrid drives, heat exchangers, control electronics, batteries, lines, valves, fuel cells, pumps, ...
- Medical devices: catheters, dialysis filters/boxes, irrigation/tube systems, septic fluid jars, syringes, external lungs,...
- Packaging / cosmetics: dosing pumps, plastic bottles, cartridges, ...
- Household appliances: water switches, water pumps, gas valves / fittings, stoves, compressors, ...
- **General industry:** cylinders, safety/check valves, couplings, grippers, ball valves, seals, throttle pins, ...

#### Accessories (optional):

- External venting valve
- Temperature compensation







#### Control unit:

Expansion and o	Expansion and combination options				
7EDboy	1 external	— max 2 channels			
ZEDbox	+1 external	max. 2 channets			
ZEDbase+	1 internal	max. 2 channels			
	+1 external				
7FDmod	internal	— max. 8 channels			
ZEDIIIOU	external	inax. o channels			
75041	internal				
ZEDflex	external	max. 8 channels			

#### Interfaces:

Auxiliary				
Temperature gauge				
Interface to control unit				
<b>Dimensions (HxWxD):</b> $5.47 \times 9.25 \times 12.40 \text{ in} / 139 \times 235 \times 315 \text{ mm}$				
Weight: approx. 8 – 10 kg				
Power supply: 24 VDC (+10 / -5 %) 5 A				
<b>Test medium:</b> Compressed air (oil and water free per ISO 8573-1, Class 3)				

chnical data:	Gauge pressure	Differential pressure	Stagnation pressure	Mass flow	Flow
Test pressure range	Vacuum 232 psi / 16 bar		0 6 bar	Vacuum 116 psi / 6 bar	
Test pressure accuracy	1 % FS (Full Scale)	1 % FS	1 % FS	1 % FS	
Measurement range	same as test pressure range	- 1.45 1.45 psi - 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
Measuring resolution			0.5 ppm from end value		
Smallest measurable pressure change (by type)	0.5 Pa (14.50 psi / 1 bar) 4Pa (232 psi / 16 bar)	0.1 Pa	0.1 Pa (50 mbar) 1.5 Pa (6 bar)		
Measuring accuracy (leak rate)	depends on test setup		depends on test setup	Typically 5 % of measurement value no less than 0.5 % from end value	
Repeatability	depends on t	test setup	depends on test setup	0.5% of measurement value no less than 0.05% from end value (depends on test setup)	

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