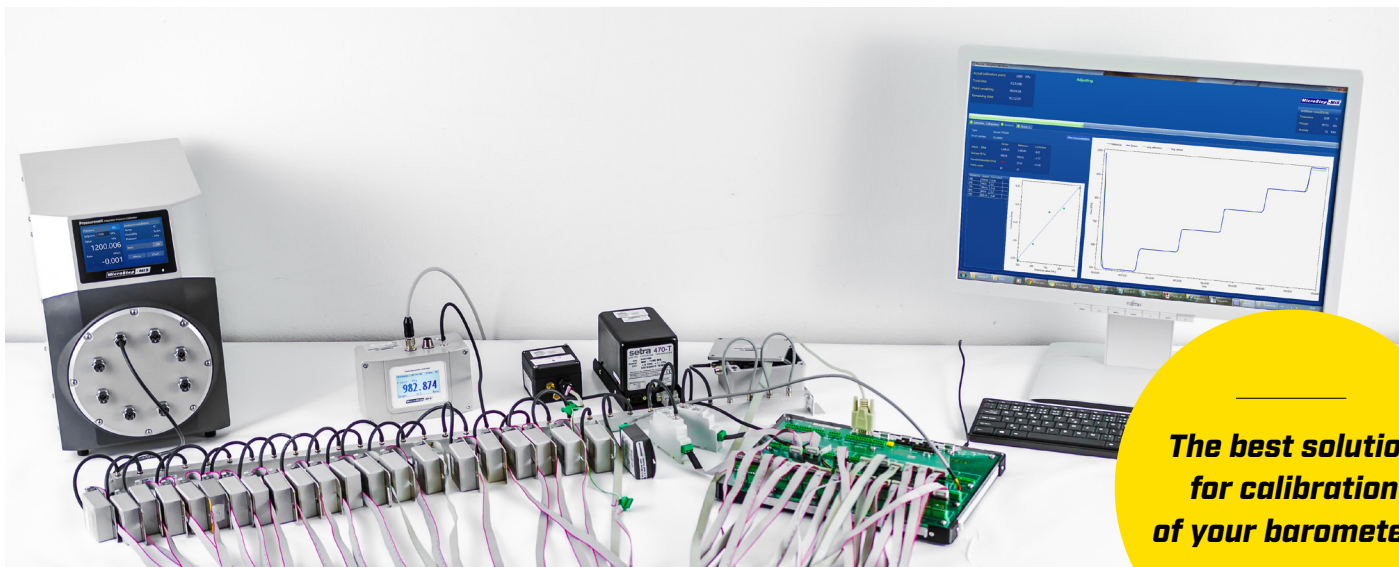


Pressurewell

Integrated Pressure Calibrator

Pressurewell is a pressure calibrator developed and manufactured by MicroStep-MIS. Whether you use it as a benchtop device or take it to the field, Pressurewell is always ready to deliver the highest accuracy.



Excellent stability



Fast response



Room conditions monitoring



No external devices required

Highly integrated pressure calibrator

Pressurewell is all you need to accurately calibrate pressure sensors in one box. No need for external gas sources, compressors or vacuum pump. Everything required is already built-in, small and silent.

Regulator algorithm

Sophisticated regulator algorithm provides fast response, no overshoot, high stability of the pressure setpoint.

Reference sensor

Pressurewell features highly accurate, stable and reliable pressure sensor, which is used as a feedback sensor and also as a [reference](#).

Calibrated sensors

Sensors can be connected to the device using high quality pressure connectors which have the auto-shutoff feature. The unused ports are automatically shut. Pressurewell optionally features readout card with 6 inputs for sensors. The readout card connects to the rear panel of Pressurewell. It saves space,

reduces the number of lab PC ports and enables to read the calibrated values during calibration.

Color touchscreen display

A 5-inch LCD enables a simple operation and status check. You can set a desired setpoint and check the course of values in the system.

Connectivity

Pressurewell has ethernet and RS-232 ports as a standard. These enable remote control of the device, or even the whole calibration thanks to the fact, that calibrated sensors and reference can all be connected to Pressurewell. All the data is available for the PC software.

Automatic calibration and adjustment

The adjustment and calibration process is fully automatic. Pressurewell with IMS4 CalibLab already has many types of sensors integrated by default. In case of special requirements we can integrate new types of sensors, if it is technically possible. The adjustment and calibration is done in several

predefined points. Results of them can be automatically verified by ongoing calibration, which is also documented by a calibration certificate. To support a specific sensor, please contact: info@microstep-mis.com.

Field / Portable Version

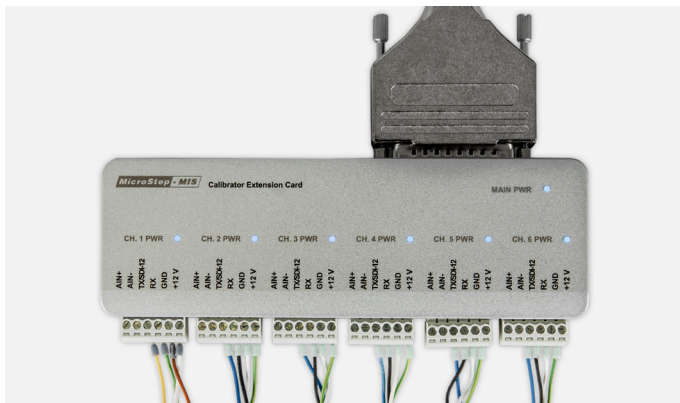
Pressurewell contains everything you need for field calibration, including ambient sensors.

Automate with IMS4 CalibLab

With IMS4 CalibLab, the process of calibration and adjustment of sensors can be fully automated.

Outputs

The outputs are analog voltage, SDI-12 and 5 V UART compatible. RS-232, RS-485 and other buses may be also specified.



External read-out card for convenient probes connection



Pressure reference MSB780X



Calibration software IMS4 CalibLab

Pressure control

Method of generation	rotary diaphragm pumps, solenoid valves
Working gas	air
Air supply / exhaust	built-in pumps, no external devices required
Pressure range	300 to 1200 hPa, consult for other range
Pressure accuracy	better than 10 Pa @ 20 to 25 °C
Pressure stability	1 Pa
Maximum regulated volume	2 l, consult for larger regulated volume
Feedback sensor	resonating magnetic tube
Feedback sensor accuracy	better than 10 Pa @ 20 to 25 °C
Feedback sensor long-term stability	better than 5 Pa / year

Communication ports

Reference	RS-232
Calibrated sensors	analog voltage 0 to 2.5 V, SDI- 12, 5 V UART
Remote communication	Ethernet, RS-232
Baud rate all serial ports	adjustable
Protocol	ASCII

Mechanical

Dimensions	350 x 240 x 430 mm
Weight	13 kg (approximately)

Transportation

Transport box	hard case (optional)
Dimensions	510 x 350 x 620 mm
Weight	10 kg (approximately)

Electrical

Supply voltage	100 to 240 V AC
Maximum supply power	50 W

Environmental

Operating temperature	5 to 40 °C
Operating relative humidity	< 80 %RH

