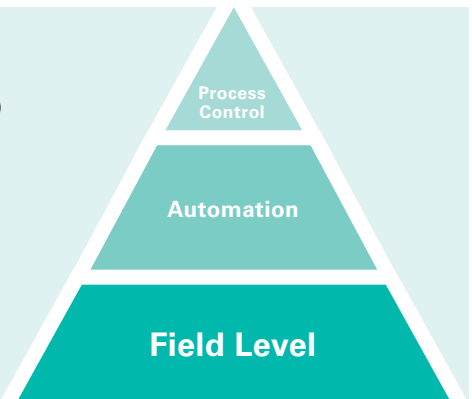# RIPRESS *premium*

High Precision Level Measurement

mm

Reservoir Level and Volume Management
Superior Accuracy and Long Term Stability
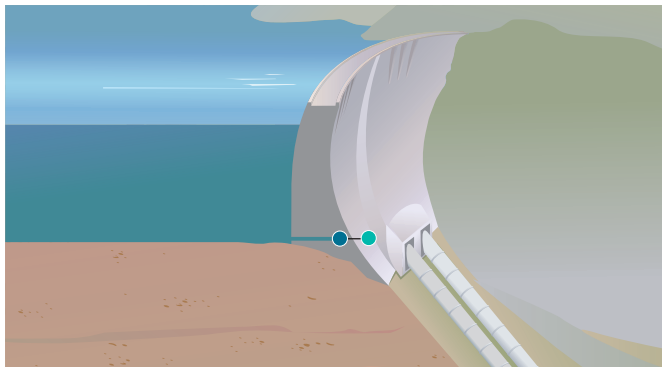Hydrostatic or Pneumatic Pressure Measurement

BERTSCHI Instrumentos

rittmeyer BRUGG

RIPRESS *premium*

rittmeyer
BRUGG

FEATURES AND BENEFITS

- Very accurate calculation of storage water volume (resolution < 1 mm H_2O)
- Cost savings by optimization of the water balance
- Transmitters for hydrostatic or pneumatic pressure measurement
- Superior accuracy of typical < 0.01% FS (quartz crystal sensing element)
- 100% thermal compensation with quartz crystal temperature signal
- Excellent long-term stability (near-zero drift of sensing technology)
- Controller with built-in web server for easy configuration
- Up to four measurement sections per Controller
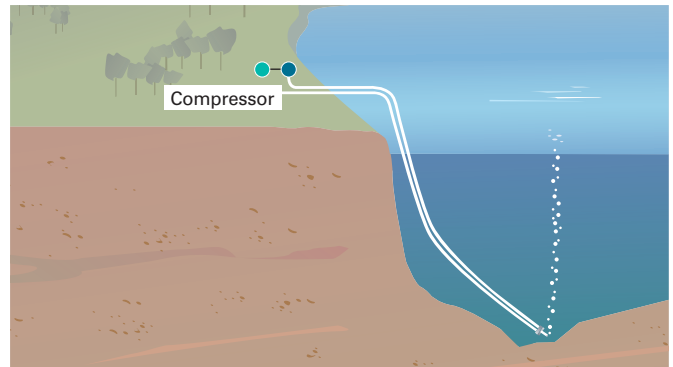- IEC 60870-5-104 and Modbus RTU/TCP communication

Process Control

Automation

Field Level

RIPRESS *premium Applications*

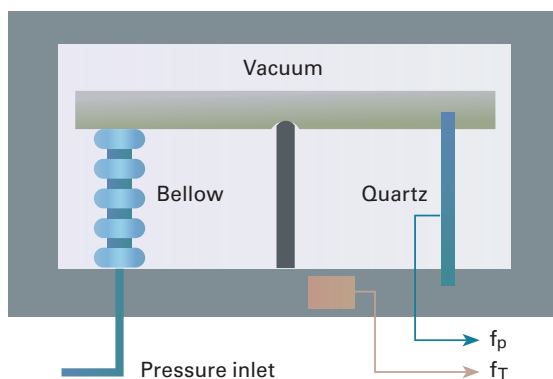### Hydrostatic Level Measurement

Sensor has direct contact with water.

Pneumatic Level Measurement

Compressor

Sensor measures counter pressure produced by an air compressor and has no direct contact with water.

Sensing principle

Vacuum

Bellow

Quartz

f_p

f_T

Pressure inlet

- f_p: the oscillation frequency of the precision quartz crystal resonator is a function of the applied pressure.
- f_T: the resonant frequency of the quartz crystal temperature sensor is used for thermal compensation of the calculated pressure.

RIPRESS *premium Measurement*

	hydrostatic	pneumatic
maximum Pressure range	0...275 m H_2O	0...135 m H_2O
	0...400 psi	0...200 psi
Temperature	+5…+60 °C	-10…+60 °C
	+40…+140 °F	+14…+140 °F
Accuracy (typical)	< 0.01% FS	< 0.01% FS
Resolution	< 1 mm H_2O	< 1 mm H_2O

Controller functions

- Math functions: Add/Sub/Mul/Div/Pow/Int/Diff/Filter
- Programmable conversion tables (e.g. for lake volume)
- Integrated data logger with remote access
- Trend function and limit value monitoring
- SMS alarm via external GSM/GPRS modem