

# RIPRESS *premium*

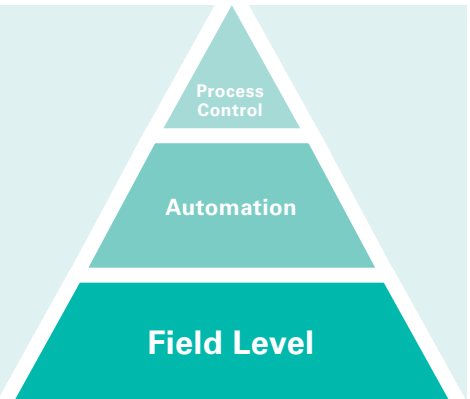
*High Precision Level Measurement*



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

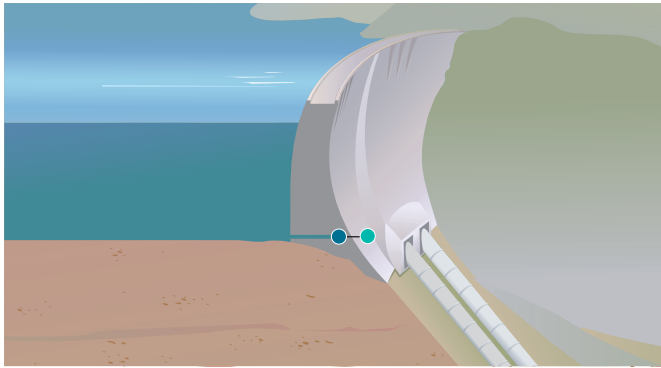
## FEATURES AND BENEFITS

- Very accurate calculation of storage water volume (resolution < 1 mm H<sub>2</sub>O)
- 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



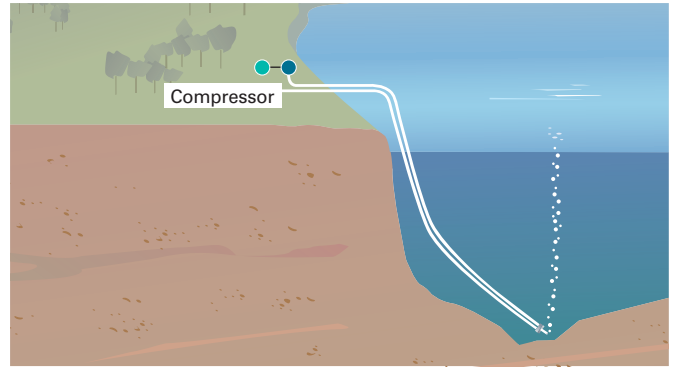
## RIPRESS premium Applications

### Hydrostatic Level Measurement



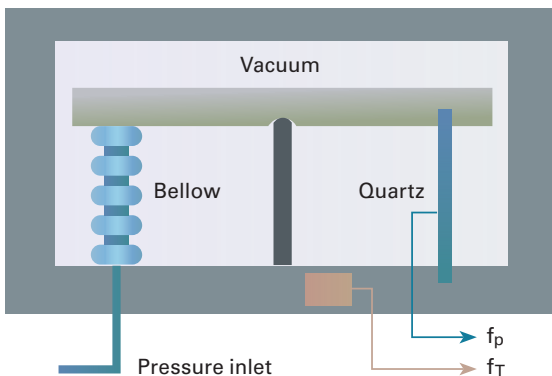
Sensor has direct contact with water.

### Pneumatic Level Measurement



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

### Sensing principle



- $f_p$ : 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 <sub>2</sub> O	0...135 m H <sub>2</sub> O
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 <sub>2</sub> O	< 1 mm H <sub>2</sub> O

### 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

