

The background of the image is an aerial photograph of a dense forest covered in snow. The entire image is overlaid with a semi-transparent blue filter. The text is centered horizontally and vertically.

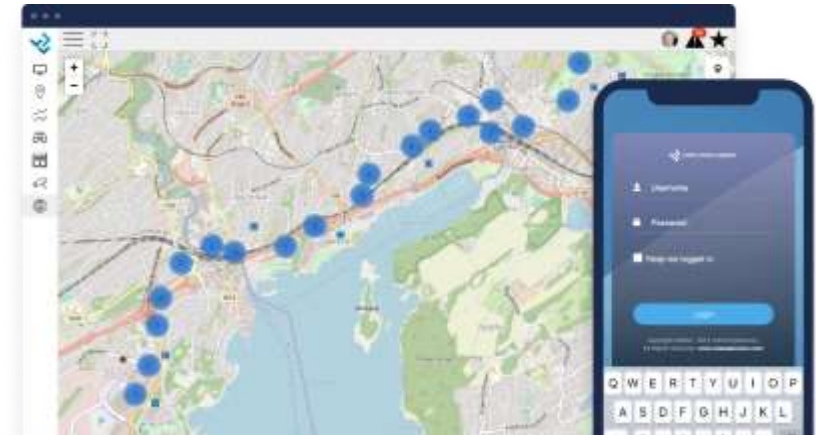
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Instrument Technology AS

Snow measurements



Secure data from sensor to web



- Hardware
 - Sensors
 - Dataloggers
 - Custom turnkey solutions

- Remote Communication
 - Mobile network
 - Satellite

- Data availability
 - Web presentation
 - Data storage
 - API solutions

- Services
 - Installation
 - Maintenance
 - Support

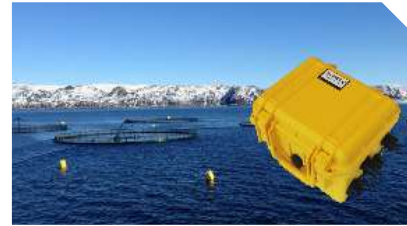
Support our customers in a broad field of markets



Meteorology



Climate specific measurements



Water Quality and environmental monitoring



Renewable energy



Plant physiological measurements



Geotechnical



Hydrogeology



Hydrology

Snow measurements

Depth

- Ultrasonic
- Laser
- Guided radar



Water content (SWE)

- Gamma radiation
- Snow pillow
- Snow weight



Surface Temperature

- Passive IR technology
- Laser



Reflected light/solar radiation

- Thermopile radiation



+++ precipitation, soil moisture, snow drift, flux +++

Snow depth

Ultrasonic

- + Low power consumption
- + Measures an area and not a single point
- + Cheaper technology
- Not as precise as laser ($\pm 1\text{cm}$)
- Might need replacement of sensor membrane



Laser

- + High accuracy ($\pm 5\text{mm}$)
- + Little or no maintenance
- Only a single point measurement
- High power consumption



Multipoint Laser

- + Very high accuracy ($\pm 3\text{mm}$)
- + Measures over an area (36 points)
- + Little or no maintenance
- High power consumption



Snow Water Equivalent

Snow Weight

- + Good measurement range
- + Few negative physical effects
- A lot of groundwork
- The size limits the available locations

Snow Pillow

- + Requires less comprehensive groundwork than snow weight
- + Cheapest solution
- Challenges with ice bridging
- Environmental risk, puncturing

Gammassensor

- + Few negative physical sideeffects
- + Easy to install
- Limited range (600mm SWE)

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