WOODSENSE

Sensor solution to monitor timber structures and detect damages early



Solution features

The Woodsense solution consist of a sensor, platform and alarm system. The wireless sensors are easy to install and automatically detects critical moisture conditions.



Automatic and wireless measurements of wood moisture content, relative humidity & temperature for 10 years.



Automatic reports for quality assurance in a few clicks



An online platform where all data is collected in a simple overview together with local weather data



Automatic alarms when critical conditions emerge for quick repair



Setup and registration in under 2 minutes

Sensor use cases

Monitoring moisture conditions can be used both for:

- Quality assurance during construction or renovation.
- More efficient maintenance after construction.
- Following the material from factory and throughout the entire construction process.
- Testing new construction methods and materials.

Solution benefits



DZZZZ

Enables you to detect damages immediately



Improves your quality assurance and makes part of it automatic.



Improves collaboration and service to collaborators

"From somebody who've used many systems, then this is by far the easiest to navigate and setup"

Birger Jørgensen, BM Byggeindustri

WOODSENSE

Tested and proven sensor created for long battery life













Features

- Measuring Wood Moisture Content (WMC), relative humidity and temperature.
- Wireless connectivity through LoRaWAN..
- Data presentation and analysis on online platform.
- Automatic alarms, notifying when anomalies or critical conditions arise.
- 10 years life time at 6 transmission per day.
- Up to 24 measurements/transmissions per day.
- Accurately calibrated for Douglas for, Pine, Spruce and other types of construction wood.
- Depth of measurement up to 100mm, with the ability to measure in the interior of the timber exclusively.

Sensor accuracy

- WMC +- 0.3% (in the 7 to 27% range)
- Relative humidity +- 2% RH (In the 10 to 90% range)
- Temperature +- 0.2 °C (in the -20 to 60 degrees range)
- All measurements extend past this range at a reduced accuracy

Mechanical enclosure

- IP54 Rated (Upgradeable to IP67)
- 46 x 91 x 31 mm
- Wires can be used to extend measurement to hard to reach places
- Screws are used for both fastening sensor, and as measurement probes

Connectivity

- LoRa protocol that is widely supported and has growing coverage
- Long Range communication at extremely low power consumption
- Gateways cover a radius of up to 500 meters.



