

MEASUREMENT AND EVALUATION UNIT

ProGeo® Flex

Moisture monitoring — modular, connected, scalable.



ProGeo® Flex

From leak monitoring of single rooms to networked monitoring of complex buildings.

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The system

One unit for single rooms and for entire buildings.

ProGeo® Flex monitors moisture and climatic conditions in buildings – reliably, flexibly and at an early stage. Analogue tape sensors detect moisture in critical areas, for example in the floor construction, behind wall linings, beneath heating manifolds, behind façades or in the roof build-up. Digital sensors additionally record temperature and humidity in compartments and cavities. Integrated temperature and humidity sensors also allow the wood moisture content to be determined reliably.

Each ProGeo® Flex unit can be fitted with up to 12 moisture sensors. In standard operation the system is online – readings are available on the online platform for evaluation and analysis. In the event of critical changes, alarms can be triggered automatically by e-mail or SMS. Alternatively, offline operation with acoustic or visual alarming directly at the device is possible. For larger properties, several units can be combined into one comprehensive monitoring system.

12	2"	4	24/7
Moisture sensors per unit	Colour touch display on the device	Communication paths: WLAN, LAN, LoRaWAN, NB-IoT	Monitoring with alarms by e-mail and SMS

Online monitoring

All readings come together on the online platform: time histories, graphical evaluations and sensor status for the entire property. In the event of an alarm, notification is sent automatically by e-mail or SMS.

Alarming directly at the device

Independently of any connection, ProGeo® Flex warns visually via the display and optionally acoustically via the integrated signal generator. Readings, sensor status and settings can be read and adjusted directly at the device.

Offline operation

Where no connection is possible or wanted, ProGeo® Flex works entirely offline. Measurement data is stored locally on an SD card. Alarms are issued at the device or via the building management system — by potential-free contact or digital interface.

Scalable across the entire property

Several ProGeo® Flex units work together as one overall system — for example per floor or construction section. A central unit takes over orchestration, alarm management and communication.

Design and connections

Everything essential in one compact base module.



- 1 **2" colour touch display**
Readings, sensor status and system settings. In the event of an alarm the display lights up as a visual warning.
- 2 **Touch operation**
All views and settings are operated directly at the device. No additional device is required.
- 3 **Acoustic signal generator**
Integrated alarm signal at the device, acknowledgeable on the display.
- 4 **SD card slot and BMS**
Local data storage on SD card, later read-out on an external device. Potential-free contact or digital interfaces for the building management system

MOUNTING VERSIONS



DIN rail mounting

In the control cabinet or plant room, clipped straight onto the DIN rail.



Enclosure mounting

In a closed enclosure with cable glands, protected up to IP68 depending on version.



Wall mounting

Flush-mounted power supply and white faceplate for areas with public access (reduced number of sensors and modules).

COMMUNICATION OPTIONS



WLAN

Integrated. Connection via the existing building network.



LAN

Wired and low-interference, ideal for plant rooms.



LoRaWAN

Long range via a dedicated radio network in the property.



NB-IoT

Mobile network where no local network is available.

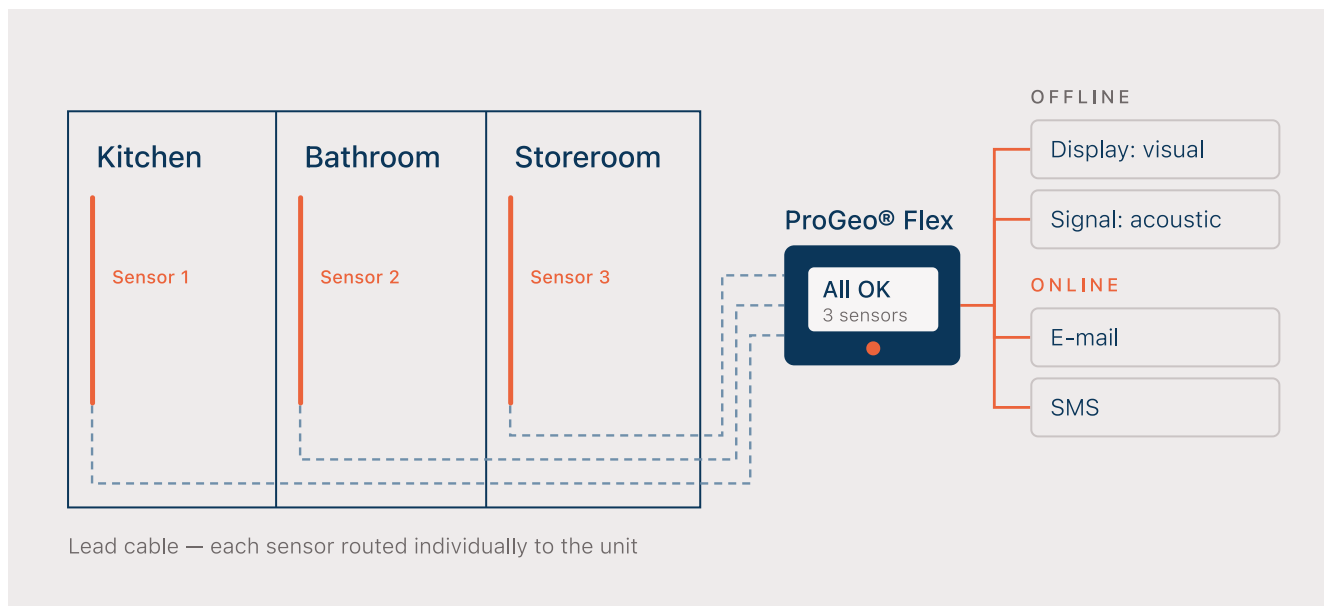
From a single room to the entire property

The system grows with the property.

SMALL INSTALLATION

Wet rooms of a single apartment

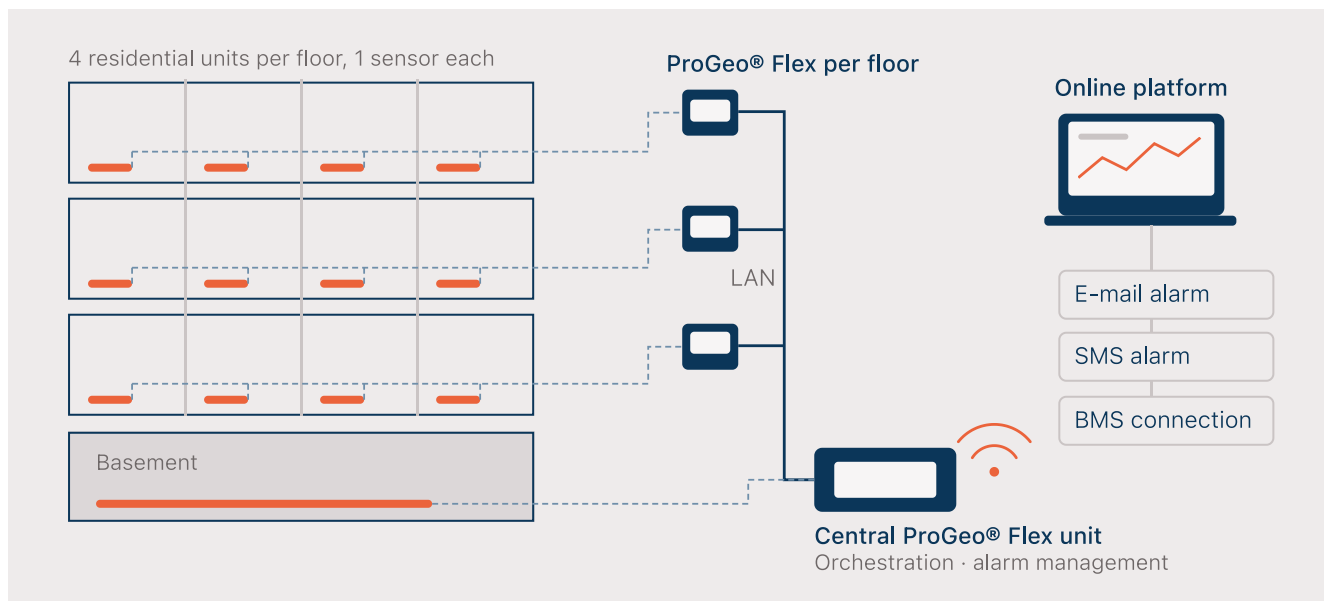
In the kitchen, bathroom and storeroom, tape sensors are laid on the subfloor along the walls. Each sensor is connected to the ProGeo® Flex unit by its own lead cable. If moisture occurs, the device warns visually via the display and acoustically via the signal generator; in addition, a notification is sent by e-mail and SMS. On request the installation works entirely offline.



LARGE INSTALLATION

Building with several units

Each residential unit is equipped with one moisture sensor. The sensors of a floor are brought together on one ProGeo® Flex unit via lead cables. A central ProGeo® Flex unit in the basement takes over orchestration, alarm management and communication. Readings are available on the online platform; alarms are sent by e-mail, SMS or to the building management system.



Technical data

ProGeo® Flex

FEATURE	INFORMATION
Moisture sensors	Up to 12 analogue and 40 digital sensors per ProGeo® Flex
Analogue sensors	Moisture sensors for detecting moisture and leaks
Digital sensors	Temperature/humidity sensors or wood moisture sensors
Display	2" colour touch display
Data storage	Local storage on SD card, read-out on an external device
Alarming	Visual and acoustic at the device
Online alarming	By e-mail and SMS
Communication	WLAN, LAN, LoRaWAN, NB-IoT — depending on the version, also combined
BMS connection	Potential-free contact or digital interface (Modbus RTU, Modbus TCP, BACnet IP, KNX)
Operating modes	Online as standard, offline operation optional
Power supply	9–24 V DC
Mounting	Depending on the version: control cabinet, DIN rail or wall enclosure
Scalability	Several ProGeo® Flex units can be combined, one central unit orchestrates

Base module

Dimensions	depends on the version — details on request
Protection rating	to be ensured by the enclosure
Ambient temperature	0 to 40 °C
Installation location	Dry indoor spaces

Enclosure (optional)

Versions	Control cabinet, DIN rail or wall enclosure
Dimensions	larger than the base module — per version
Protection rating	up to IP68 depending on the version
Ambient conditions	extended, outdoor mounting also possible

Details on protection rating, dimensions and permissible ambient conditions must be distinguished between the base module and the enclosure. Binding values for the respective version are provided on a project-specific basis.

The Monitoring People

ProGeo® has been developing automated moisture monitoring systems for structures since 1992. Talk to us about the design for your property — we plan sensors, units and evaluation to suit the application.

Contact

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