

Reliable protection
against water damage.



Warning systems protect buildings and infrastructure.

telma
electronics

Field-tested water detectors

GLW100 Wall Mounting



Increasing demand in damage prevention

Water damage to buildings or infrastructure occurs every 5 minutes in Switzerland alone. Incidents of damage due to ageing of services and equipment cause costs of several hundred million francs every year and are rising continuously. An effective protection can be achieved by just investing a minimal amount of money.

To hedge risks from water damage, the leak detectors from telma ag have been implemented thousands of times in diverse applications.

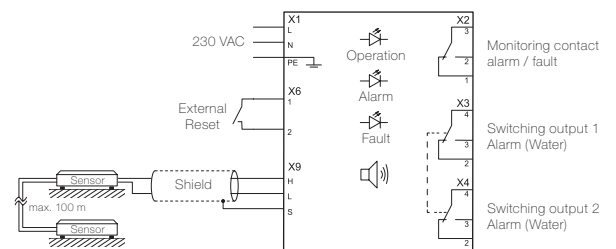
They serve to provide reliable detection of drinking water, de-mineralised water, emulsions, acids and alkalis. A comprehensive monitoring is possible by interconnecting multiple sensors. Various setting possibilities allow optimal adaptation to the operating conditions and for superordinated alarm and C&I systems.

Autonomous Universal Device

- Relay outputs for alarm, pumps, valves, etc.
- Self-monitoring of detector and sensor cable
- LED-Display: Operation, alarm, fault
- Utilisation with sensor SKL400

Technical Data

Supply	230 VAC
Power consumption	3.0 VA
Switching capacity	5 A / 230 VAC
Sensitivity alarm	100 kΩ (10 μS)
Sensor cable Length	max. 100 m
Isolation electrodes	3.75 kV~
Degree of protection	IP65
Dimension (W x H x D)	122 x 120 x 62 mm



Sensor SKL400

- Serial connection for multiple sensors is possible
- Simplified installation
- Integrated cable break monitoring
- High sensitivity for low conductive media

GL100 Cabinet Installation

WD110 Building C&I / PLC



Multifunctional Evaluation Device

- Configuration on the front
- Self-monitoring of detector and sensor cable
- Can be installed on a standard 11-pin socket
- Utilisation with sensor SKL400

Technical Data

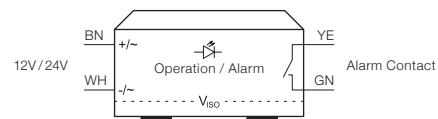
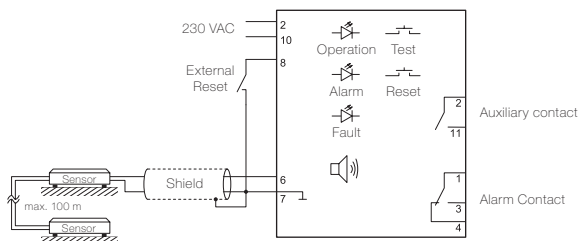
Supply	230 VAC (24 VDC)
Power consumption	3.0 VA
Switching capacity	5 A / 230 VAC
Sensitivity alarm	Type S: 100 k Ω (10 μ S) Type E: 1 M Ω (1 μ S)
Sensor cable Length	max. 100 m
Isolation electrodes	3.75 kV~
Dimension (WxHxD)	36 x 68 x 82 mm (without socket)

Sensor with Integrated Messaging Electronics

- Direct connection to the building control system or PLC
- Galvanic isolation of the electrodes
- Very low power consumption
- Contact opens with an alarm

Technical Data

Supply	12 / 24 VDC / AC
Current consumption	DC: 8 mA / AC: 18 mA
Switching capacity	30 V / 100 mA
Sensitivity alarm	100 k Ω (10 μ S)
Connection cable	3 m (extendable up to 100 m)
Isolation V_{ISO}	2.75 kV~
Degree of protection	IP68
Dimension (\varnothing xH)	80 x 25 mm



Technical Data

Dimension (\varnothing xH)	80 x 25 mm
Cable connection	Spring-loaded terminals 0.5 mm ²
Securing hole	\varnothing 4.0 mm
Degree of protection	IP67
Operation temperature	-20 to 80 $^{\circ}$ C

GLW200 Alarm Centre



WLF100 Wireless Sensor

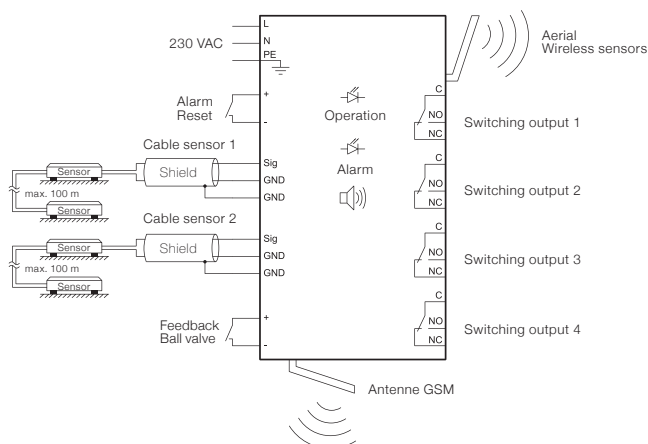


Device for Wireless and Wired-up Sensors

- Programmable via front panel
- Relay outputs are freely configurable
- Up to eight wireless sensors can be connected
- Two wired-up sensor chains
- SMS notification (optional)

Technical Data

Supply	230 VAC
Input	5 VA
Switching power relay	5 A / 230 VAC
Radio frequency	868 MHz
Degree of protection	IP65
Housing	Polycarbonate
Dimension (WxHxD)	200x120x82 mm

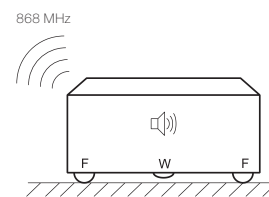


Sensor for the detection of Water, Humidity and Temperature

- Message/ Alarm with damp sub-surfaces
- Alarm at 1.5 mm water level
- Transmission of the battery status
- Optional: Humidity / ambient temperature
- Other wireless protocols are possible

Technical Data

Supply	Battery 9 V Alkaline
Battery exchange	Every 4 years
Radio signal	Wireless M-Bus (868 MHz)
Indoor range	approx. 25 m (depending on the situation)
Degree of protection	IP22
Dimension (ØxH)	85x26 mm



Electrodes

F: Detection, ground (damp)

W: Detection, water (from approx. 1.5 mm)

Examples of realised customer projects.



Data centre



Pumping systems, district heating



Water treatment



Mono block ventilation



Coolant and refrigerant pumping systems



Media distribution centre

Data centre

- Protection for high-quality IT infrastructure
- Large-scale monitoring with GLW200 and multiple point sensors SKL
- Alternative: GL100 (switching cabinet installation) and multiple SKL or WD110

Pumping systems, district heating

- Early detection of line leaks in unsupervised areas
- Leakage monitoring with GL100 and SKL
- Alternative: GLW200 with SMS notification and WLF

Water treatment

- Treatment of process water by reverse osmosis in an industrial plant
- Leakage monitoring with GL100 and multiple sensors SKL
- Alternative: GLW200 with SMS notification and WLF

Mono block ventilation

- System with various mono block ventilation systems
- Leakage monitoring with WD110 installed directly on the building management system
- Alternative: GL100 (switching cabinet installation) with SKL

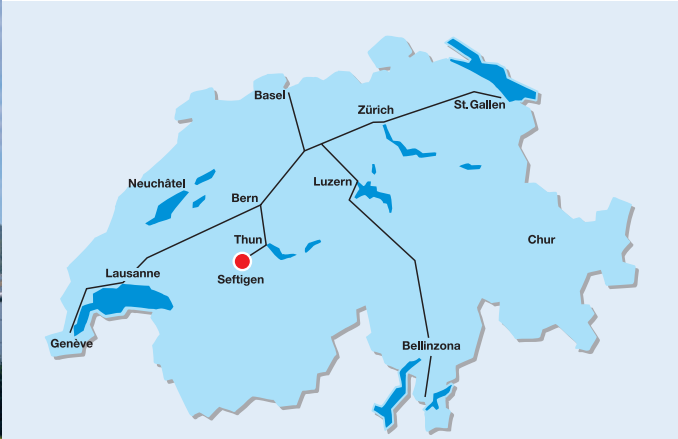
Coolant and refrigerant pumping systems

- Cold air processing for climate control of a hospital operation
- Large-scale monitoring with GL100 and multiple sensors (SKL Model)
- Alternative: GLW200 (without SMS notification) with SKL

Media distribution centre

- Installation for distributing air, gas and electricity
- Leakage monitoring with GLW100 and SKL
- Alternative: GL100 (switching cabinet) with SKL or WD110 installed directly on the building management system

Partnership for life with over 40 years experience.



A6 motorway exit Thun-Nord

References with guarantee.

ALPIQ

conex*

ENGIE

ETA VIS

Honeywell

ISS

SIEMENS

suissetec

**walter
meier**

History

- 1975 Founding of telma ag in Bern
- 1981 Relocation to Ittigen / Bern
- 1991 Move into its own company premises in Seftigen
- 2016 Planning new building

Company Divisions

- Own production
- Customised Electronics
- Subcontracting

Core Competencies

The objective-oriented focus on the customer requirements is one of the major strengths of telma ag. Thanks to short distances and a common language, our customers gain valuable time and are therefore faster into the market place. With our own development and production facilities, we are a complete supplier for electronic control systems. Even complex tasks are simply solved by collaborating with specialised partners. The total costs can be pleasantly low with a high degree of automation and the highest-level of qualified staff.