

Flow to Control

flow measurement for wastewater,
sewage systems & industrial waters

Velocity/Discharge

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Company Overview

SOMMER Messtechnik is a measurement technology specialist with more than **40 years of experience** in environmental monitoring and sensor systems. The company develops, produces and markets sensors, instruments and complete measurement solutions for data acquisition, transmission and evaluation in fields such as **hydrology, meteorology, water management, sewage and geotechnics**.

Founded in **1987 by Wolfram Sommer**, the business began with early projects in hydrography and meteorology and grew into an independent company in 1997. In 2013, the company adopted the name to **SOMMER Messtechnik** and expanded its reach globally while remaining family-managed.

Over the decades, SOMMER has introduced a series of **innovative technologies**, including radar sensors for non-contact level and discharge measurement, advanced data loggers, and systems for remote monitoring in harsh environments. Milestones include early

avalanche and landslide monitoring systems, Doppler radar technology for flow measurement, tracer systems for discharge measurement, and the SQ series for wastewater flow.

The company's mission emphasizes **understanding the environment to measure it reliably**. SOMMER aims to deliver solutions that are robust, accurate and practical for real-world monitoring challenges. Team experience, a quality-focused approach and a spirit of innovation guide product development and customer support.

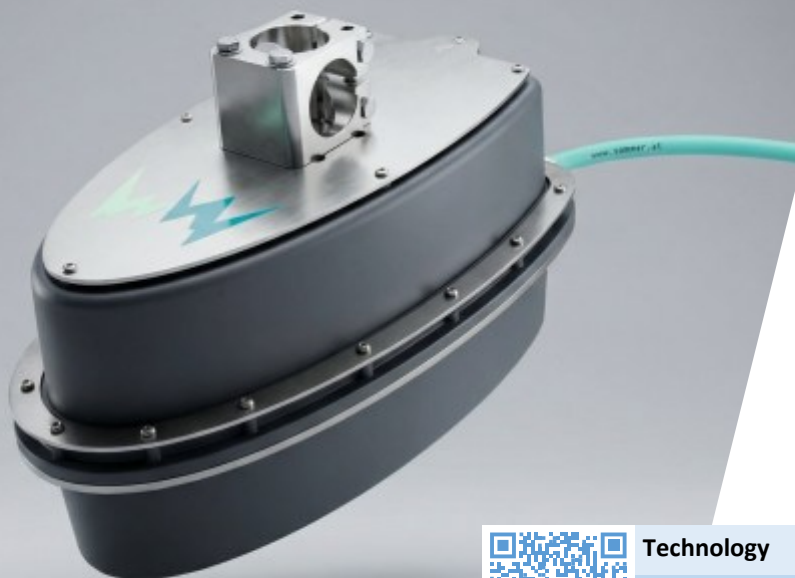
SOMMER's solutions are used worldwide in applications such as **river and channel monitoring, sewage networks, weather stations, flood early warning, snow measurement and environmental research**. The company continues to be a trusted partner for customers needing dependable measurement technology and data systems across disciplines.

SQ-R+

Non-contact flow measurement



YouTube



Technology	Radar
Purpose	Velocity/Level/Discharge
Mobility	Stationary

The SQ-R+ is a contact-free discharge measurement system developed for continuous monitoring of sewage and wastewater flows. It combines radar-based water level measurement and radar surface velocity measurement in one compact device. Both parameters are measured simultaneously and processed directly inside the sensor to calculate discharge in real time.

Water level is determined by measuring the travel time of a radar signal reflected from the water surface, while surface flow velocity is measured using the Doppler frequency shift principle. After each measurement, the SQ-R+ applies an advanced hydraulic model from SOMMER Messtechnik to derive the mean flow velocity and calculate discharge automatically. The hydraulic model uses dynamically calculated k-factors to adapt to changing flow conditions.

The contact-free measuring principle allows installation above the water level without structural work in the channel. This prevents contamination and mechanical wear, enables long-term maintenance-free operation, and ensures reliable measurements even in aggressive sewage environments and during flood events.



Dimensions	272 × 153 × 186 mm
Total weight	1.55 kg
Protection	IP68
Power supply	9...30 VDC
Power consumption	Standby approx. 1 mA
Operation temperature	-40...85 °C
Velocity / Discharge	0.08...16 m/s (practical), automatic discharge calculation, level accuracy ≤ 2 mm
Distance to water surface	0.05...20 m
Interfaces	RS-485 ASCII, Modbus RTU, 4x analog output 4...20 mA, SDI-12, Pulse output
Miscellaneous	Integrated lightning protection, advanced noise reduction (ANR), self-check

Velocity & Discharge

Advantages

- ❑ Contact-free radar measurement
- ❑ Maintenance-free operation
- ❑ Combined level and velocity sensor in one housing
- ❑ Automatic discharge calculation
- ❑ Advanced hydraulic model with dynamic k-factors
- ❑ AI-based machine learning for environmental compensation
- ❑ Integrated self-check and data quality output
- ❑ Reliable operation in aggressive sewage environments
- ❑ Suitable for flood-prone locations

Data Logger

The **SQ-R+** can be used with **SOMMER data loggers** as well as with third-party data loggers via standard interfaces for data acquisition, storage, and transmission. Communication is supported via RS-485, SDI-12, and analog interfaces. The data logger enables remote access via mobile communication, allowing data retrieval and parameter adjustment without on-site access.

Fields of application

- ❑ Sewage and wastewater channels
- ❑ Open and closed canals
- ❑ Municipal sewage networks
- ❑ Industrial wastewater systems
- ❑ Wastewater treatment facilities

SQ-Commander

The **SQ-R+** can be configured and operated using **SQ-Commander** software from SOMMER Mess-technik. The software supports sensor setup, cross-section definition, and parameter adjustment via a clear user interface. Measurement data and velocity diagnostics can be visualized directly, supporting correct installation and reliable operation.



**Non-contact radar
for measuring flow
velocity in open channels
and partially filled pipes**



Technology	Radar
Purpose	Velocity
Mobility	Stationary

The SV is a radar-based flow velocity measurement system for open channels and partially filled pipes. It enables contact-free determination of surface flow velocity in sewage and wastewater applications. The sensor is installed above the water surface, outside the flow, which reduces mechanical stress and avoids contamination. Due to its robust design and IP68 protection, the SV is suitable for long-term operation in harsh environments, including flood-prone areas.

Measuring principle

The SV measures surface flow velocity using the Doppler frequency shift principle. A radar signal with a constant frequency is transmitted at a defined angle towards the water surface. The moving water reflects the signal with a frequency shift proportional to the flow velocity. The sensor analyzes this frequency shift to determine velocity. Flow direction is detected by distinguishing positive and negative frequency shifts. An internal inclination sensor measures the vertical angle

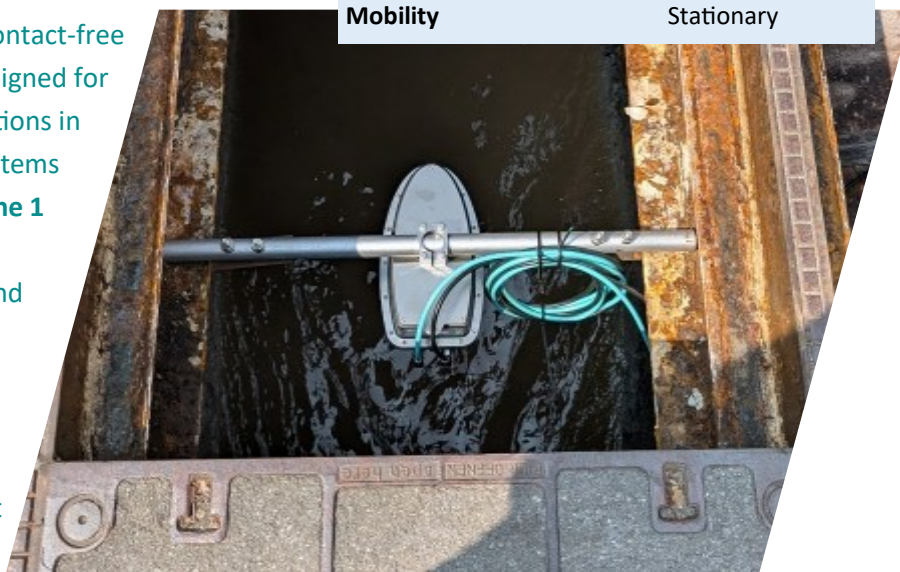
Advantages

- ❑ Contact-free velocity measurement
- ❑ Reduced risk of soiling and damage
- ❑ No regular sensor maintenance
- ❑ Automatic vertical angle compensation
- ❑ Flow direction recognition
- ❑ Integrated self-check and status output
- ❑ Advanced velocity diagnostics via radar spec-

Dimensions	272 × 153 × 186 mm (including mounting cube)
Total weight	1.55 kg
Protection	IP68
Power supply	9...30 VDC
Power consumption	Active measurement approx. 140 mA (default 20 sec). Standby approx. 1 mA
Operation temperature	-40...85 °C
Distance to water surface	0.05...20 m
Interfaces	RS-485 ASCII, Modbus RTU, analog output 4...20 mA, SDI-12
Miscellaneous	24 GHz radar, 12° opening angle, automatic angle compensation, integrated lightning protection

SV/SQ-ATEX

The SV-ATEX and SQ-ATEX are contact-free radar measurement systems designed for sewage and wastewater applications in explosive atmospheres. Both systems are approved for use in ATEX **zone 1** and **zone 2** and are suitable for continuous operation in harsh and aggressive environments. The sensors are installed above the water surface, outside the flow, ensuring reliable long-term operation without direct contact with the medium.



Both systems use **radar technology** to perform contact-free measurements above the water surface. The measured signal is processed internally to determine flow parameters. Automatic vertical angle compensation supports stable measurement results under varying installation conditions.

Fields of application

- ❑ Sewage systems in ATEX zones
- ❑ Wastewater channels
- ❑ Open channels
- ❑ Partially filled pipes
- ❑ Municipal wastewater networks

Advantages

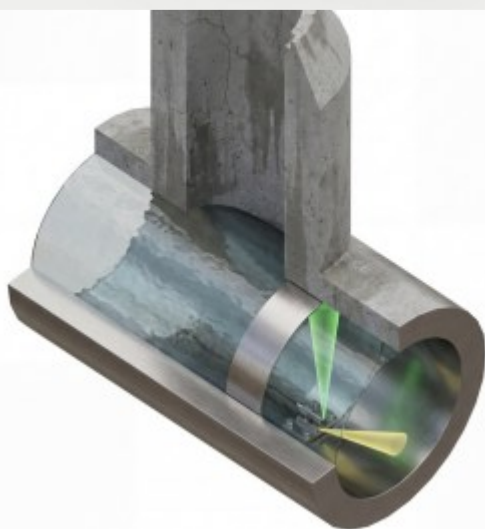
- ❑ Contact-free radar measurement
- ❑ Approved for explosive atmospheres (ATEX)
- ❑ Reduced risk of contamination and damage
- ❑ Maintenance-free long-term operation
- ❑ Installation above the water level
- ❑ Integrated self-check and status output

	SV-ATEX	SQ-ATEX
Measurement	Velocity	Velocity, water level, discharge
Dimensions	272 × 152.2 × 185.5 mm (incl. mounting cube)	
Total weight	1.55 kg	
Protection	IP68	
Power supply	12 ±1.2 VDC	
Power consumption	110 mA / 1 mA	140 mA / 1 mA
Active / Standby		
Operation temperature	-20...60 °C (sensor)	
Distance to water surface	0.05...10 m	
Interfaces	RS-485 ASCII, Modbus RTU, analog output 4...20 mA, SDI-12, Pulse output	
Miscellaneous	ATEX II 2G Ex ib IIB T4 Gb, 24 GHz radar, automatic angle compensation	





Technology	Ultrasonic/Pressure
Purpose	Velocity/Level/Discharge
Mobility	Stationary



The PQ-P flow meter is an discharge measurement system designed for continuous monitoring of water and wastewater flow in pipes, ducts and open channels. The system combines an ultrasonic Doppler velocity sensor with a PTM pressure probe to measure flow velocity and water level simultaneously, enabling reliable discharge calculation. It is suitable for sewer networks, water treatment plants and industrial facilities.

Advantages

- ❑ Combined velocity and level measurement
- ❑ Wide discharge measurement range
- ❑ Flexible installation options
- ❑ Easy integration into control systems
- ❑ Resistant controller housing for harsh

Measurement	Velocity + level (pressure)
Dimensions	Probe: 160 × 24 mm
Total weight	~1.3 kg (incl. 10 m cable)
Protection	PVDF, PU, 316 SS sensor
Power supply	9...28 VDC
Operation temperature	Probe: -10...80 °C
Water depth	Immersion up to 1 bar
Interfaces	RS-485 ASCII, Modbus RTU, analog output 4...20 mA, SDI-12, Pulse output

Measuring principle

The PQ-P determines discharge using two synchronized measurements. The ultrasonic Doppler sensor measures the mean flow velocity using twin transducers, while the PTM pressure probe measures water level via hydrostatic pressure. The controller calculates discharge from velocity and level data, ensuring accurate flow determination across a wide range of hydraulic conditions.



PQ-R

Discharge measurement system



Technology	Ultrasonic/Radar
Purpose	Velocity/Level/Discharge
Mobility	Stationary

The PQ-R is a discharge measurement system for wastewater and open-channel flow monitoring. It combines a Doppler velocity sensor with a radar level sensor to continuously measure flow in sewer networks, treatment plants, and industrial channels. The system enables reliable, bidirectional flow measurement under varying hydraulic conditions.

Advantages

- ❑ Contact-free level measurement
- ❑ Bidirectional velocity detection
- ❑ Reliable under difficult conditions
- ❑ Continuous discharge calculation

Measurement	Velocity + level (radar)
Dimensions	Radar: Ø 76 × 109 mm
Total weight	~1.8 kg (incl. 10 m cable)
Protection	Radar: IP68
Power supply	Controller: 9...28 VDC
Operation temperature	Radar: -40...80 °C
Water depth	0...6/8 m
Interfaces	RS-485 ASCII, Modbus RTU, analog output 4...20 mA, SDI-12, Pulse output

Measuring principle

The PQ-R determines discharge using two independent measurements. Flow velocity is measured with a Doppler sensor using twin ultrasonic transducers. Water level is measured contact-free by a radar level sensor. The controller combines both values with the channel geometry to calculate flow continuously.

Fields of application

- ❑ Sewer networks and combined sewers
- ❑ Wastewater treatment plants
- ❑ Stormwater and overflow monitoring
- ❑ Industrial wastewater systems
- ❑ Open channels and partially filled pipes





Technology	Probe
Purpose	Level & temperature
Mobility	Stationary

The PTM measures water level using the hydrostatic pressure principle. A temperature-compensated piezo membrane sensor detects the pressure created by the water column above the probe and converts it into a level value. Water temperature is measured simultaneously. Measurement data are transmitted digitally via the SDI-12 interface to a connected data logger or monitoring system.

The PTM determines water level using the hydrostatic pressure principle. A temperature-compensated piezo membrane sensor measures the pressure generated by the water column above the probe and converts it into a level value.

Dimensions	Ø 24 × 160 mm
Total weight	~200 g
Housing	Stainless steel, 1.4404 (DIN EN)
Power supply	8 ... 30 VDC
Power consumption	Active < 6 mA; standby < 0.5 mA (12 V)
Operation temperature	-10 ... +80 °C
Interfaces	SDI-12, analog output 4...20 mA
Measurement range	0 ... 10 m / 0 ... 1 bar, different range — on request

Advantages

- ❑ High measurement accuracy at 0.05% FS
- ❑ Long-term stability and low energy demand for extended operation
- ❑ Digital SDI-12 interface simplifies data integration
- ❑ Compact and robust stainless steel housing
- ❑ Simultaneous level and temperature measurement

Fields of application

- ❑ Hydrology monitoring
- ❑ Meteorological stations
- ❑ Hydropower facilities
- ❑ Sewage and wastewater systems
- ❑ Industrial and mining applications



TQ-F

The **Fluorescence Tracer TQ-F** is a **mobile tracer discharge measurement system** for determining flow rates in natural and artificial water bodies. It is designed for applications where conventional flow measurement methods are not feasible. The system enables reliable discharge measurements using fluorescence tracers and supports field operation with portable equipment and integrated software.

Measuring principle

The TQ-F uses the tracer dilution method with instantaneous injection. A defined amount of fluorescence tracer is injected into the water. Downstream, one or more fluorescence probes measure the tracer concentration over time. Based on the injected tracer mass, calibration factor, and the recorded concentration curve, the system calculates the discharge. The complete measurement process is supported by the TQ-Commander software.

Advantages

- ❑ Mobile and flexible discharge measurement
- ❑ Reliable cross-sectional geometry results
- ❑ Very small amount of tracer required
- ❑ Low detection limit using fluorescence tracers
- ❑ Suitable for sewage measurements
- ❑ Real-time visualization of measurement data
- ❑ Bluetooth data transmission
- ❑ Simultaneous use of up to four probes

Protection	TQ-Amp: IP66
Power supply	4 × 1.2 V NiMH batteries (AA)
Power consumption	Approx. 25 h with 4x2500 mAh batteries
Operation temperature	TQ-Amp: -20...+60 °C; Probes: 0...+50 °C
Tracer	Fluorescein/Rhodamine
Miscellaneous	Bluetooth class 1 (up to 100 m), internal memory 8 MB, TQ-Commander software



Technology	Tracer dilution
Purpose	Discharge
Mobility	Portable



Fields of application

- ❑ Measurement in rivers, channels & pipes
- ❑ Turbulent and fast-flowing waters
- ❑ Waters with complex cross sections
- ❑ Sewage and wastewater channels
- ❑ Locations difficult to access with sensors





HSR-10

Mobile handheld
radar sensor



YouTube



Technology	Radar
Purpose	Velocity
Mobility	Portable

The HSR-10 is a portable, handheld non-contact radar developed for fast and flexible surface velocity measurements in open rivers and channels. Designed for modern fieldwork requirements, it enables measurements without installation effort, cabling, or direct access to the water.

The compact and lightweight device can be operated easily by one person and is ready for immediate use at changing locations. Powered by a rechargeable battery, the HSR-10 works autonomously and supports mobile operation independent of fixed infrastructure. Measured data are transmitted wirelessly via Wi-Fi, allowing convenient access and evaluation directly on site. The contact-free measuring method increases safety, especially in high flows, turbulent waters, or difficult-to-reach areas. With its robust housing and integrated self-check functions, the HSR-10 supports reliable measurements under real-world environmental conditions and is well suited for temporary surveys, inspections, and spontaneous field campaigns where speed, safety, and autonomy are essential.

- Safe, wireless monitoring
without any sensor contact with water



Dimensions without case	263 × 123 × 271 mm (with battery)
Total weight without case	1.2 kg plus 0.6 kg battery
Protection	IP65
Power supply	9...18 VDC
Battery capacity	2.0 Ah or 3.0 Ah
Operation temperature	-40...60 °C
Measurement range	0.08...16 m/s (practical), accuracy ± 0.01 m/s, ± 1% FS
Distance to water surface	0.5...100 m
Miscellaneous	24 GHz radar (K-Band), Wi-Fi 2.4 GHz (up to 50 m), 1 mm/s resolution, Android App

Measuring principle

The HSR-10 measures surface flow velocity using the Doppler frequency shift principle. A radar signal with a constant frequency is transmitted towards the water surface. The moving water reflects the signal with a frequency shift proportional to the flow velocity. By analysing this frequency shift, the sensor determines the surface velocity.

HSR-Commander

The HSR-Commander is a free Android application that allows seamless communication with the HSR-10 Handheld Surface Radar. It connects to the HSR-10 via Wi-Fi, enabling real-time display of measured surface flow velocity directly on a compatible Android smartphone or tablet. The app provides an intuitive user experience on mobile devices, making field work fast and efficient without the need for laptops or external data loggers.

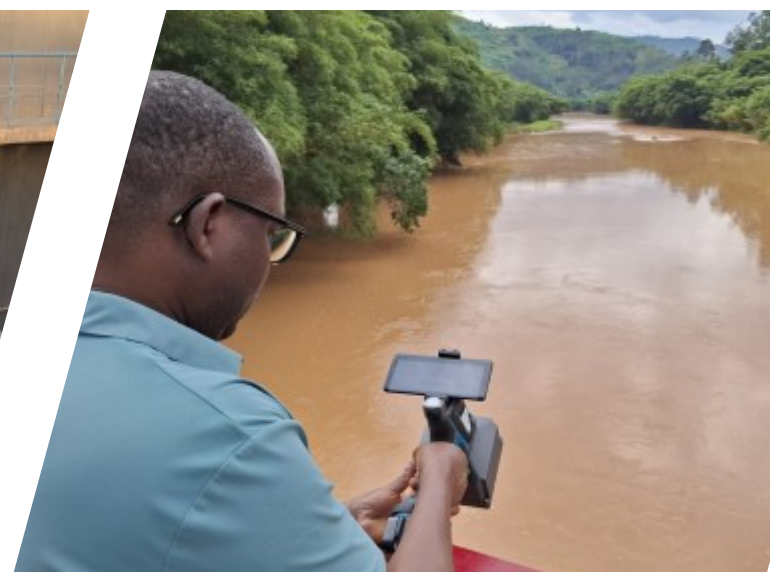
- ❑ Wireless connection via Wi-Fi (no cables)
- ❑ Real-time display of flow velocity
- ❑ Simple and convenient interface

Fields of application

- ❑ Rivers, streams, open channels, pipes
- ❑ Turbulent and fast-flowing waters
- ❑ Difficult-to-access measurement sites
- ❑ Mobile flow surveys
- ❑ Temporary and spot measurements

Advantages

- ❑ Portable contact-free velocity measurement
- ❑ Suitable for high velocities and turbulent flows
- ❑ Safe operation at difficult-to-access sites
- ❑ No regular sensor maintenance
- ❑ Wireless data transmission via Wi-Fi
- ❑ Integrated self-check and data quality output
- ❑ Advanced Noise Reduction (ANR)
- ❑ Hands-free convenience and stable positioning with tripod mount option



SOMLEVEL

Contact-free water level measurement



Technology	Radar
Purpose	Level
Mobility	Stationary

The SOMLEVEL-8 /15/30 radar level sensors provide highly accurate, contact-free water level measurement without direct contact to the medium. These compact and maintenance-free devices use radar technology to determine the surface water level from a distance, making them reliable tools for fixed installations in rivers, channels, canals, basins or tanks. The sensors are designed for integration into existing measurement systems and support industrial and environmental monitoring applications.

Measuring principle

SOMLEVEL sensors emit a high-frequency micro-wave impulse (80 GHz) towards the water surface. The water reflects the pulse back to the sensor, and the run-time of the reflected signal corresponds to the distance between sensor and surface. This distance is converted into the current level measurement. The non-contact radar measurement is independent of temperature, wind or turbulence, ensuring high reliability under varied environmental conditions.

Advantages

- ❑ Contact-free, maintenance-free operation
- ❑ Compact design for easy installation
- ❑ High accuracy across multiple ranges
- ❑ Independent of environmental influences such as wind or temperature
- ❑ Easy integration with existing systems and data loggers
- ❑ Flexible interfaces:
4...20 mA, SDI-12, RS-485 Modbus

	SOMLEVEL-8	SOMLEVEL-15	SOMLEVEL-30
Dimensions	Ø 76 × 109 mm		Ø 76 × 130 mm
Total weight	0.7 kg		
Protection	IP68		
Power supply	12...35 VDC		
Operation temperature	-40...60 °C		-40...80 °C
Velocity/Discharge/Level	Level measurement	Level measurement	Level measurement
Distance to water surface	0...8 m	0...15 m	0...30 m
Miscellaneous	80 GHz radar, ±5 mm accuracy		80 GHz radar, ±2 mm accuracy

RL-15/35

Contact-free water level measurement

The RL-15 / RL-35 are high-accuracy contact-free radar sensors for surface water level measurement without direct contact to the medium. These stationary devices use microwave pulse radar technology to continuously monitor the distance to the water surface. They are designed for long-term installation and reliable performance in environmental and hydrological stations.

Advantages

- ❑ Contact-free, maintenance-free measurement for long-term operation
- ❑ High accuracy of ± 2 mm over extended ranges
- ❑ Compact and vandalism-secure design
- ❑ Independent of environmental influences such as temperature or wind
- ❑ Easy integration into monitoring systems

Measuring principle

The RL sensors use a pulse radar principle: a short microwave impulse is sent toward the water surface, and the sensor briefly goes into standby. The reflected pulses are received and evaluated internally. The run time of the impulse corresponds directly to the distance to the current water surface level, allowing precise measurement of level changes.

Fields of application

- ❑ River and stream level monitoring
- ❑ Hydrological and flood stations
- ❑ Water resource management
- ❑ Environmental monitoring systems
- ❑ Infrastructure protection and early warning

Dimensions	153 × 325 × 200 mm
Total weight	3 kg
Protection	IP66/67
Power supply	9.6 ... 36 VDC
Operation temperature	-40 ... +80 °C
Distance to water surface	RL-15: 0 ... 15 m RL-35: 0 ... 35 m



MRL-8

Weatherproof data
logger with integrated
data transmission



Technology	Datalogger
Purpose	Depends on the sensor
Mobility	Stationary

The MRL-8 is a compact and versatile data logger designed to acquire, process, store and transmit environmental measurement data. Its waterproof housing, integrated modem and charging electronics make it suitable for autonomous and remote monitoring installations. The MRL-8 supports a wide range of sensors from SOMMER Messtechnik as well as third-party devices, allowing flexible system configurations for hydrological and environmental monitoring tasks.

Measuring principle

The MRL-8 operates as a central data acquisition unit, it records measurement signals from connected sensors. Measured values are processed internally, stored in flash memory and transmitted automatically via mobile communication networks or Ethernet. Configurable measurement intervals allow adaptation to different

Dimensions	180 × 150 × 61/91/101 mm
Total weight	1.61 kg
Protection	IP67
Power supply	9...28 VDC; solar panel supply up to 40 W / 12 V
Power consumption	Active < 23 mA @ 12 V; standby < 0.6 mA @ 12 V
Operation temperature	-30 ... +60 °C
Interfaces	4x Analog, 2x Counter, Wind speed, Wind direction, 3x Switch output, RS-485, RS-232, USB, Bluetooth
Miscellaneous	8 MB internal memory, 2-5G modem, satellite radio

Advantages

- ❑ Compact and robust data logger for long-term operation
- ❑ Waterproof housing for outdoor installations
- ❑ Integrated mobile modem for remote data transmission
- ❑ Low power consumption for autonomous operation
- ❑ Wide range of sensor inputs and interfaces
- ❑ Compatible with SOMMER and third-party sensors
- ❑ Integrated solar charging support

Versions

- ❑ **MRL-8** with 4G modem
- ❑ **MRL-8E** with 4G modem and Ethernet
- ❑ **MRL-8B** with 4G modem and internal battery

MRL-IE

Compact input extension module

The MRL-IE is a compact input extension module designed to expand the data acquisition capabilities of MRL data loggers. The MRL-IE adds multiple analog inputs and enables signal conversion between analog, digital, SDI-12 and RS-485, helping build flexible and scalable environmental monitoring stations. An enhanced version, MRL-IEa, adds analog, pulse and switched outputs for additional signal transmission options.

Advantages

- ❑ Expands any datalogger input capacity for versatile sensor integration
- ❑ Converts signals between analog, SDI-12 and RS-485 protocols
- ❑ Configurable analog inputs for voltage, current and resistance
- ❑ MRL-IEa adds analog current outputs, switched outputs, and pulse outputs
- ❑ Enables flexible telemetry system architecture
- ❑ Works with third-party devices

Fields of application

- ❑ Hydrological and environmental monitoring stations
- ❑ Expanded data acquisition for river, lake and groundwater sensors
- ❑ Telemetry systems with mixed sensor types
- ❑ Integration of additional analog, digital and SDI-12 sensors
- ❑ Indexed data transmission systems with extended I/O requirements

Dimensions	180 × 150 × 90 mm
Total weight	1.48 kg (3.26 lb)
Protection	IP67
Power supply	9...28 VDC; overvoltage and reverse polarity protection
Power consumption	min. 0.65 mA @ 12 VDC
Operation temperature	−40...60 °C (−40...140 °F)
Miscellaneous	8 configurable analog inputs; RS-485 and SDI-12 interfaces; lightning protection (6 kAPpp)



SOMCAM

Weatherproof low-light serial camera



Purpose

Solution

Mobility

Stationary

The SOMCAM is a weatherproof low-light WDR serial color camera designed for remote monitoring and embedded imaging applications. It captures high-quality color images even under extremely low illumination and provides JPEG-compressed still images for efficient data transmission. The camera connects directly to SOMMER systems, including the MRL data logger, via a serial interface, making it ideal for automated environmental monitoring stations.

Fields of application

- ❑ Remote environmental monitoring
- ❑ Hydrology and water level observation
- ❑ Flood and infrastructure monitoring
- ❑ Industrial and technical monitoring

Advantages

- ❑ High-quality images in low light
- ❑ JPEG compression for efficient transfer
- ❑ Direct connection to MRL loggers
- ❑ Integrated night illumination

Dimensions	Ø120 × 230 mm
Total weight	approx. 1200 g
Protection	IP65
Power supply	5...28 V DC (typ. 12 V DC)
Power consumption	typ. < 80 mA, max < 400 mA
Operation temperature	-40 ... +85 °C
Miscellaneous	2 MP CMOS sensor; JPEG still images; RS-485 interface; minimum illumination 0.0005 lux; automatic IR-cut; LED night illumination



HDL-10

Portable measurement solution

The HDL-10 is a mobile data logger designed for temporary measurements and small measurement campaigns. It features rechargeable batteries and a USB-C interface for both data read-out and charging. The device focuses on simplicity and user-friendliness: SOMMER HDL-10 probes can be connected via plug-and-play and are automatically recognized through the device menu. Measurement data are recorded at a one-second interval and can be transferred to a PC via USB-C. When all connectors are connected, the handheld unit is IP68 protected.



Advantages

- ❑ Mobile data logger for temporary and field measurements
- ❑ Plug-and-play connection of HDL-10 probes
- ❑ One-second measurement and storage interval
- ❑ USB-C interface for data read-out and charging
- ❑ Numerical values and time series displayed on the device

Probes

- ❑ Pressure measurement with air hose inside
- ❑ Conductivity measurement
- ❑ Fluorescein or Rhodamine measurement
- ❑ PH*
- ❑ Turbidity*
- ❑ Velocity* (Ultrasonic based with PV)
- ❑ Temperature (PT1000)*
- ❑ Air Temp and Humidity and Air Pressure*

*Currently in development.

Fields of application

- ❑ Temporary field measurements and short-term monitoring
- ❑ Mobile discharge measurements without permanent stations
- ❑ Hydrology and surface water monitoring
- ❑ Groundwater and wastewater measurements
- ❑ Harbors, river authorities and hydropower



SQ-Mobile

Contact-free
measurement solution



Purpose

Solution

Mobility

Portable

The SQ-Mobile is a contact-free measurement solution for continuous monitoring in closed channels. It is designed for installation in manholes using a dedicated mounting device, without the need for costly structural modifications. The system places the sensor outside the flood risk zone, ensuring safe operation and long-term reliability with no maintenance requirements.

SQ-Mobile is a modular solution consisting of a data logger, battery unit, and manhole mounting device. While commonly used with SQ radar sensors, the system can also be combined with other suitable radar sensors depending on project requirements. This flexibility allows users to select the most appropriate radar technology while keeping the same autonomous measurement platform.

Advantages

- ❑ Contact-free measurement without sensor contact to water
- ❑ Installation in manholes without structural modifications
- ❑ Autonomous operation with battery power and mobile data transmission
- ❑ Internal discharge calculation and data quality monitoring
- ❑ Flexible system design with selectable radar sensors



SOMCABINET

Switch cabinet for monitoring stations

The SOMCABINET is a preconfigured switch cabinet designed for environmental monitoring stations and outdoor measurement systems. It houses and protects data loggers, power supply components, and communication equipment in a robust enclosure suitable for demanding field conditions. The cabinet is available in different sizes and materials and can be delivered with a pre-installed SOMMER data logger and solar power supply for autonomous operation.



Advantages

- ❑ Weatherproof outdoor protection
- ❑ Ready-to-install system design
- ❑ Solar-powered autonomous operation
- ❑ Flexible sizes and materials
- ❑ Prewired terminals for fast setup

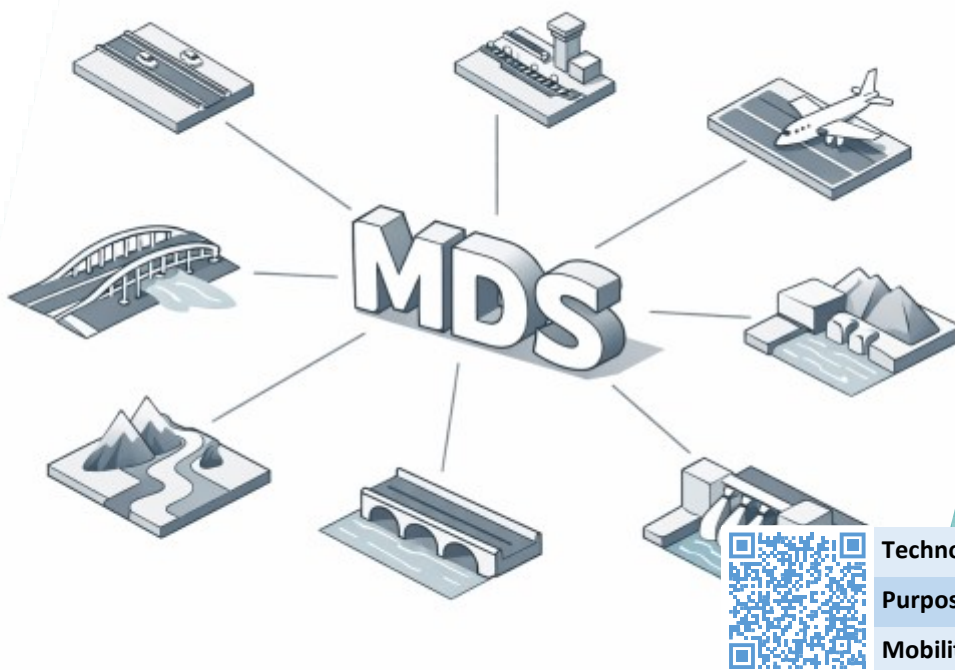
Fields of application

- ❑ Water discharge and flow monitoring
- ❑ Irrigation and wastewater treatment
- ❑ Mining liquids monitoring
- ❑ Weather and snow monitoring stations
- ❑ Geotechnical observation systems

Features

- ❑ Sizes: 380x380x210 mm or 600x380x210 mm
- ❑ Materials: Stainless steel or Fiberglass-reinforced polyester
- ❑ Pre-installed Sommer Messtechnik data logger incl. solar charger
- ❑ Pre-wired terminal blocks
- ❑ IP66 protection
- ❑ Mast mounting





Technology	Software
Purpose	Cloud solution
Mobility	On-line

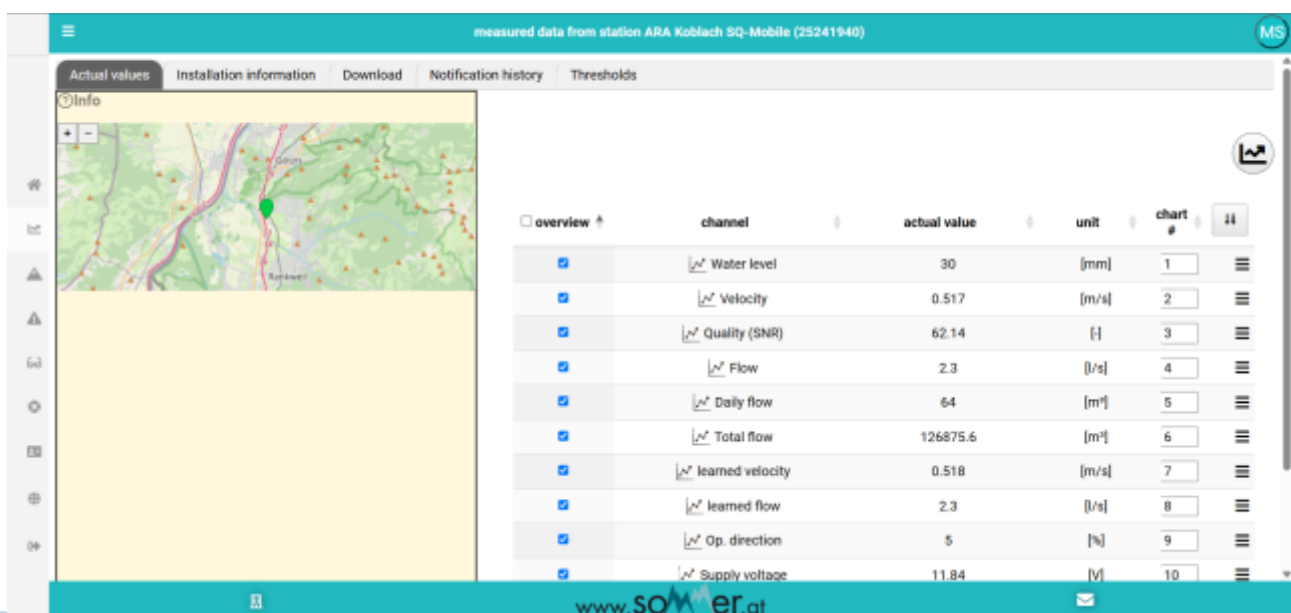
The Measured Data Server (MDS) is a web-based system that receives measurement data via internet, stores records in a central database, and makes data available for processing and graphical display through a web browser. No software installation is needed — data are online, always accessible, and supported for multiple users anywhere.

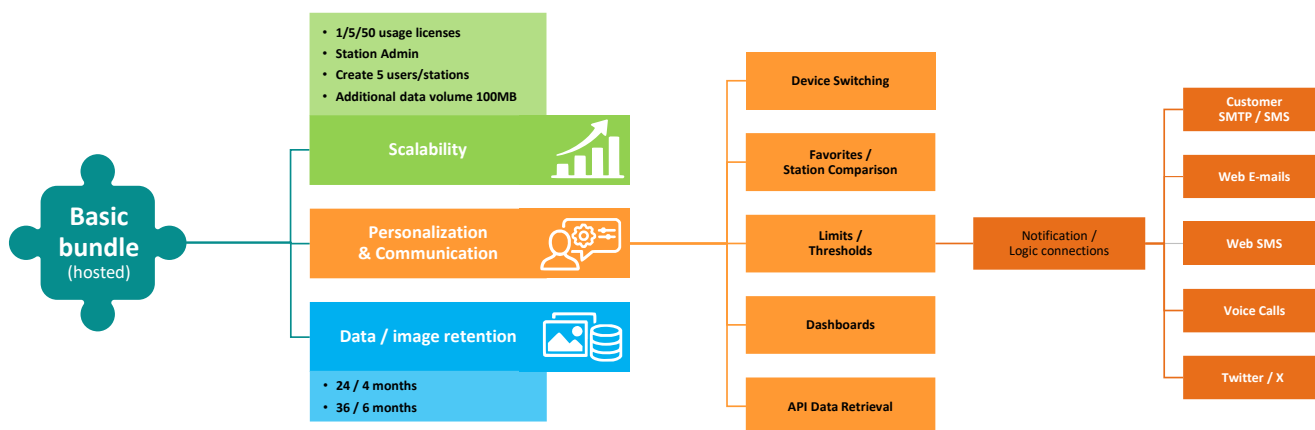
Advantages

- ❑ Web-based access, no software installation
- ❑ Centralized measurement data storage
- ❑ Reliable data transfer with redundancy
- ❑ Multi-user access with defined rights
- ❑ Browser-based graphical data visualization
- ❑ Standard export formats for integration
- ❑ Cost-efficient internet data communication

Administration and Scaling

MDS is web browser-based, requiring no local software installation. Users manage data and system functions through the browser interface. The platform scales by supporting multiple users accessing the same online datasets and integrates with existing monitoring networks via standard internet connections.





Alerts, Rules and Triggers

Based on core MDS functions, users can track data status and transmission completeness, and system procedures resume data transfer after interruptions to ensure complete streams of records.

Solution Structure

MDS includes a web service receiving measured data over internet connections, a database for central data storage, and data services for management and visualization.

Visualisation and Interface

MDS visualizes measurement data directly in a web browser, offering graphical displays linked to current data and maps showing station overviews. Custom graphs can be formatted and em-

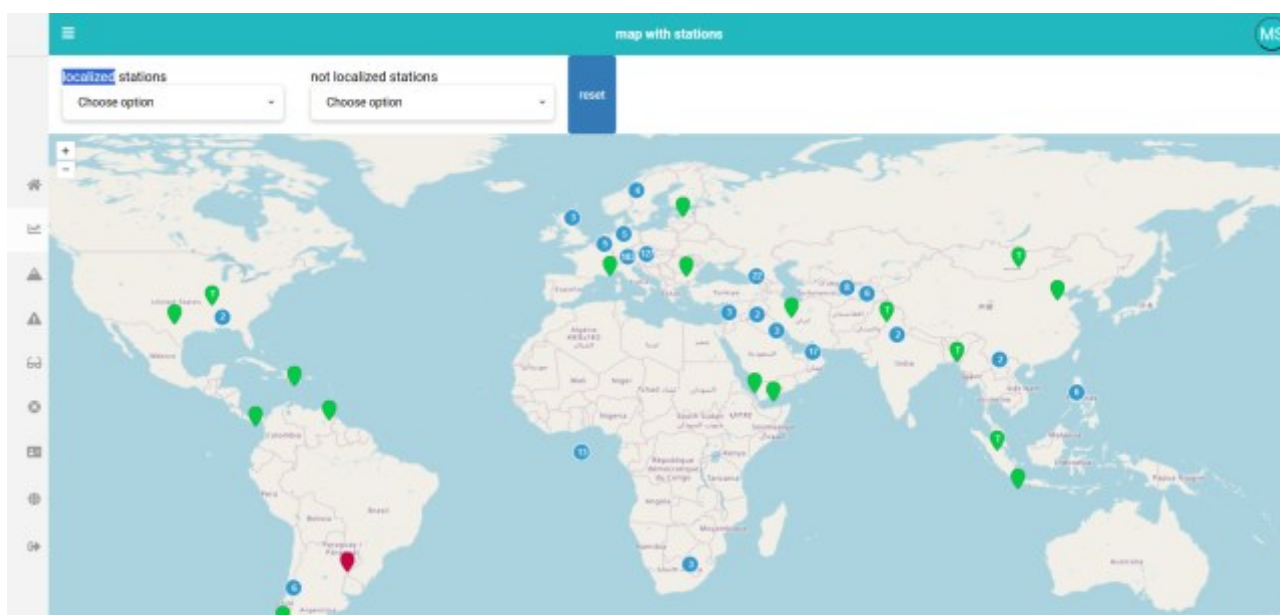
bedded on external websites.

Integrations and Openness

MDS supports data export in common formats such as ROH, CSV, and XML, enabling integration with other systems and workflows. The platform's web browser interface and standard internet communication protocols ensure interoperability with various data loggers and networked measurement systems.

Fields of Application

MDS is used in monitoring environments requiring online availability and graphical evaluation of measurement data. Supported applications include hydrology, meteorology, industry, hydro-power, sewage management, geologic monitoring, and mining. Data can be visualized, pro-



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