/ HydroMet

Hydrology | Meteorology | Groundwater | Water Quality | Water Treatment

WISKI: Water Management Information System

KISTERS

Empowering decisions of tomorrow

Professional measurement data management for all water management tasks

The WISKI water management information system is a one-stop solution for all tasks in monitoring network management, data acquisition, monitoring and evaluation. Hydrology, meteorology, ground-water monitoring, flood forecasting and alarming, water quality control, urban water systems or power plant and dam operation: WISKI offers specialist functions for any water management and hydrological tasks, simplifies daily workflows and delivers meaningful results.
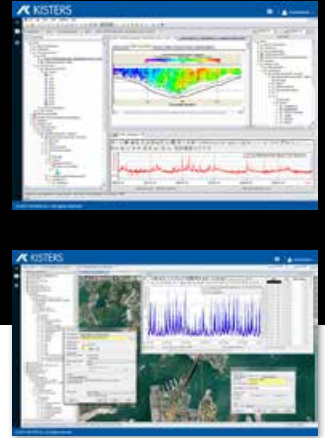
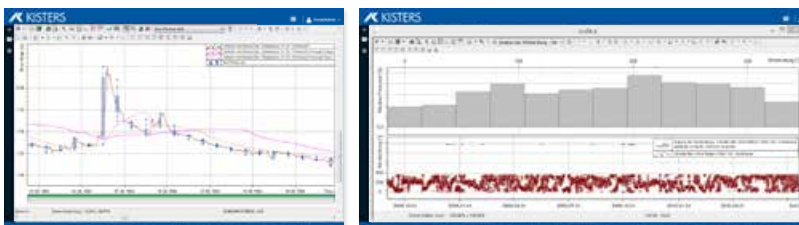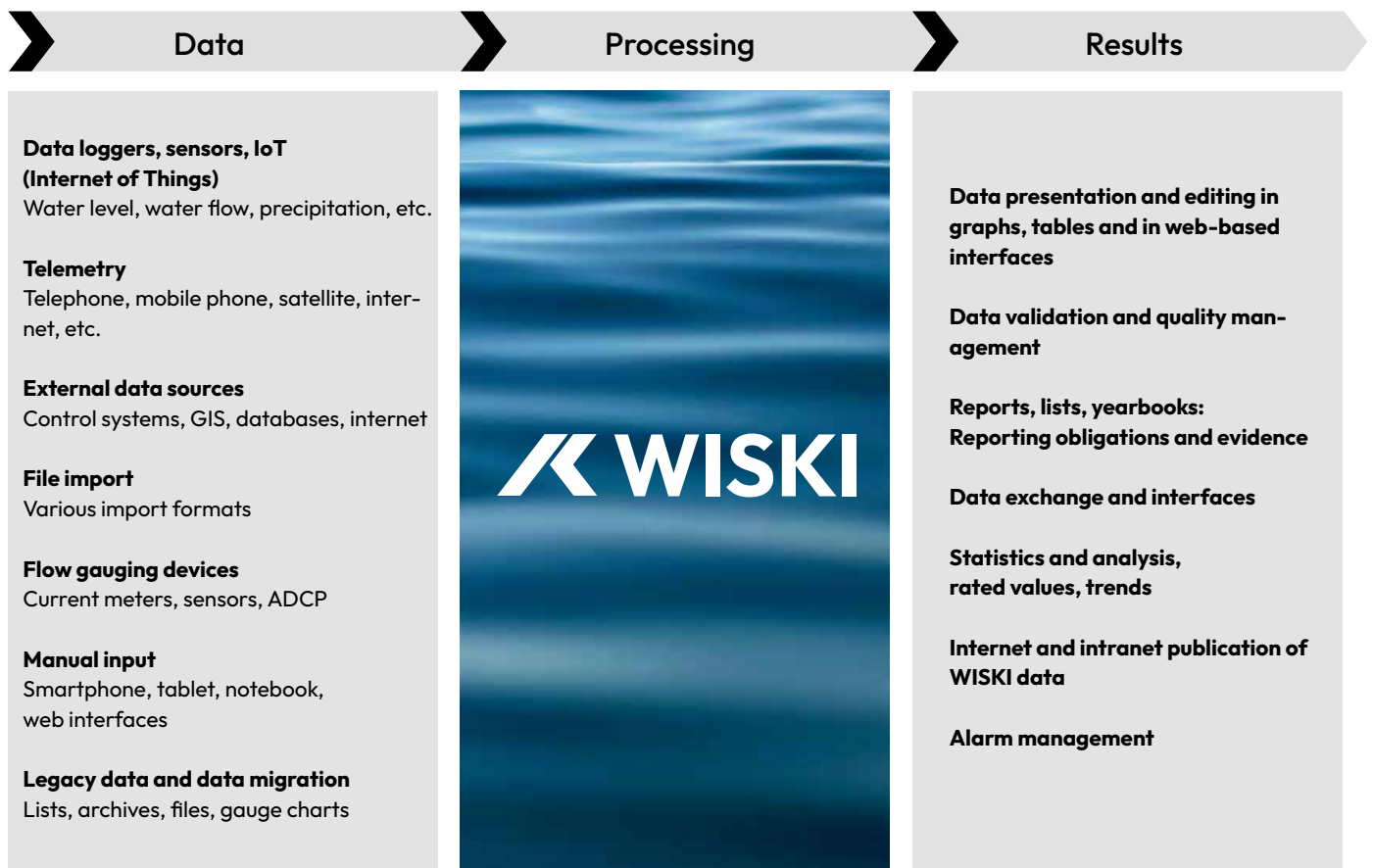# Your Advantages with WISKI

EXPERTISE
A tried and tested specialist application based on 35 years of KISTERS experience in water management, environmental monitoring and software development

INVESTMENT SECURITY
Scalable to your needs and your company size; free updates

FLEXIBILITY
Choice of on-premise installation or secure cloud solution; many add-ons for customised solutions

Data	Processing	Results

Data loggers, sensors, IoT (Internet of Things)
Water level, water flow, precipitation, etc.

Telemetry
Telephone, mobile phone, satellite, inter-net, etc.

External data sources
Control systems, GIS, databases, internet

File import
Various import formats

Flow gauging devices
Current meters, sensors, ADCP

Manual input
Smartphone, tablet, notebook, web interfaces

Legacy data and data migration
Lists, archives, files, gauge charts

WISKI

Data presentation and editing in graphs, tables and in web-based interfaces

Data validation and quality man-agement

Reports, lists, yearbooks: Reporting obligations and evidence

Data exchange and interfaces

Statistics and analysis, rated values, trends

Internet and intranet publication of WISKI data

Alarm management

The right functions for every measurement network

WISKI gets more out of your data: WISKI not only supports data management and plausibility checks to increase data quality, but also derives useful information and presents it in a way that is appropriate for the target group (experts, management, the public...). Easy-to-understand, web-based user interfaces allow you to conveniently use WISKI in your web browser.

Hydrology
— Heterogeneous measurement networks (water levels, ultrasound, redundant systems)
— Management of all parameters (e.g. water level abs./rel., water flow, water temperature)
— Discharge measurement and rating curves
— Low water and extreme value statistics
— Data validation
— Digital data acquisition in the field

Meteorology
— Management of all parameters (e.g. precipitation, snow, air temperature, air pressure, humidity, wind, evaporation, radiation)
— Storm analysis
— Spatial interpolation and areal precipitation
— Management of precipitation radar data and conversion to time series

Groundwater
— Management of all parameters (e.g. dip, abs./rel. water level, groundwater depth, flow rates)
— Digital data acquisition in the field
— Comparison with measured data from surface waters and precipitation
— Borehole profiles and other geohydrological data
— Plans of ground water isohypses

Flood
— Information and alarm management in extreme situations
— Automated monitoring of the measurement network
— Message templates
— Alarming using various media channels (e-mail, fax, phone, SMS)

Water Quality & Biodiversity
— Samples management for all chemical-physical and biological parameters
— Digital sampling acquisition in the field and import of sampling data from laboratory information management systems (LIMS)
— Validation of measurement and analysis values
— Special graph types (e.g. box whiskers) and evaluation using comparison lists and classification methods
— Flexible reporting (e.g. in compliance with the European Water Flow Directive)
— Linking with quantity data (e.g. load calculations)

Other Areas of Application
— Dam monitoring (with long-term archiving of control system data)
— Hydropower plants (with optimisation tools)
— River area management
— Urban hydrology
— Drinking water, waste water
— and many more

Cloud Solution: Simple, affordable, flexible

WISKI is optionally available as Software-as-a-Service (SaaS). We host the system in the **certified KISTERScloud**, and your employees use it via their web browser. We reduce your workload by taking care of all IT-related tasks, so that you can concentrate exclusively on your core business. Your company will not need an expensive IT infrastructure or qualified staff to manage and update the software. With KISTERScloud, you get a **modern, high-availability system at manageable cost**.

We look forward to work with you on finding the right SaaS solution for your company.
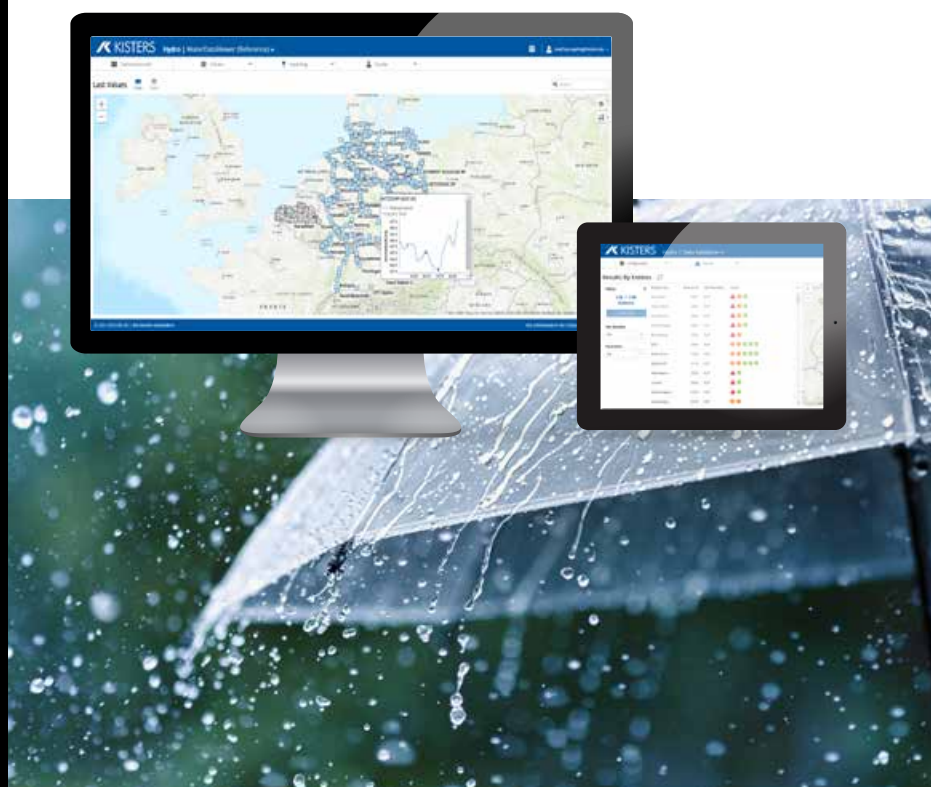
WISKI Features & Functions

Monitoring network management & Measurement data management

— Monitoring network management of an unlimited number of measuring stations, parameters and observation variables

— Metadata management, variably arranged by station types and subjects, all subject parameters are included, historisation

— Measurement Data Management: Instantaneous and mean values for each time interval and non-limited time periods, non-equidistant and rasterised, non-/interpolatable, audit trail

— Additional data types: Ensemble data, spatial data (raster), sampling, ecological observations

— Data access via tree views with flexible arrangement options and an integrated default map, favourites views

Data quality & Validation

— Data validation and correction in graphs and tables via various editing functions (individual values, time ranges, gap fills, copy/pasting of values, and many other functionalities)

— Adding quality flags characteristics and remarks to measurement data values to improve data quality

Evaluation & Statistics

— Default and extreme value statistics: automated min., max. and mean value calculations, low and high water statistics, trend analyses and many other statistical processes

— Calculation and evaluation: powerful, customisable algorithms for data calculation and data analysis

— Discharge measurement / rating curves: Capture and analysis of discharge measurements, rating curve editor with many rating curve procedures and analysis methods

Reporting & Data publication

— Reporting: standardised reports and customised, customer-specific reports

— Publication of data online and on the intranet (own portal applications)

Data Exchange, Import & Export

— Data Exchange: Import and export functions for time series/measurement values and metadata; support of open standards with Web Services, ODATA, WATERML and REST API

— Integration of time and spatial data via interfaces to GIS systems (ESRI, QGIS)

— IoT (Internet of Things) and LoRaWAN support

— Telemetry: Own remote data systems SODA & HydroTel with dedicated communication software and hardware

Software Technology

— Easy integration into existing IT environments (MS Windows, Linux, Web GUIs)

— High availability data and applications via a client-server architecture with central database (Oracle, MS SQL Server, PostGreSQL)

— Individual workflow adjustments via integrated programming environments (KiScript, Python)
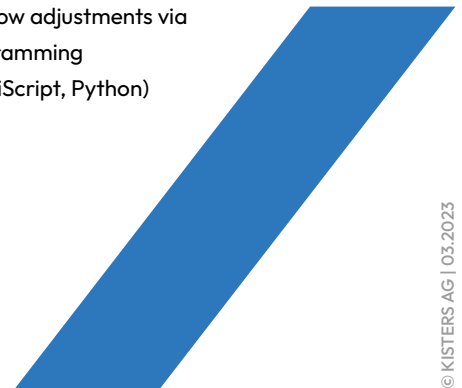
About KISTERS

KISTERS is a medium-sized IT company with 600 employees. It is headquartered in Aachen, Germany, and operates numerous national and international offices. KISTERS offers leading software solutions for sustainable resource management (water, energy, air). Professional competence, implementation experience and industry know-how make KISTERS a desirable and reliable partner. KISTERS water solutions form a framework for building efficient customer solutions based on modern technology and a deep understanding of application areas and markets. The solutions are implemented for surface water and groundwater monitoring, meteorology, flood warning, dam operation and safety, water quality and urban water systems at hundreds of customer locations with several thousand users worldwide.

KISTERS

Empowering decisions of tomorrow