



NEON[®] ONE – THE WATER QUALITY MONITORING PLATFORM

Smart. Modular. Future-Ready.

NEON® ONE – PRECISION MEETS INNOVATION

Ultimate solution for Reliable Water Monitoring



The NEON® ONE platform is a versatile and intelligent water quality monitoring system, designed for precise measurement, seamless automation, and real-time data access. Whether drinking water, swimming pools, industrial water treatment, or process control, NEON® ONE delivers reliable and scalable solutions tailored to your application. With its modular architecture, NEON® ONE allows flexible sensor integration, multiple communication options, and advanced automation functions – ensuring efficiency, accuracy, and ease of operation.

STABIFLOW® ONE ensures optimized flow conditions by providing stable sensor placement, preventing measurement fluctuations caused by changing water conditions, pressure variations, or air bubbles. By maintaining a consistent and controlled flow environment, it enhances measurement accuracy, sensor response time, and long-term stability. Its modular design supports various sensor configurations, making it the ideal choice for precise and reliable water quality monitoring across different applications.



Accurate Measurement as the Core Function

NEON® ONE delivers precise and reliable measurements, providing the foundation for effective process control and informed decision-making. With optimized pH prioritization, automatic range adjustments, and guided calibration, NEON® ONE minimizes measurement drift and maximizes data accuracy. Smart diagnostics continuously monitor sensor health and stability, providing real-time feedback to reduce maintenance efforts and prevent unexpected measurement failures.

- ✓ **Wide Parameter Coverage** – Supports free chlorine, total chlorine/biocides, pH, ORP (Redox), conductivity, sulfite and flow & temperature (FT) to meet diverse application requirements.
- ✓ **Stable & Interference-Free Readings** – Advanced signal processing and digital communication ensure high measurement accuracy with minimal external interference.
- ✓ **Sensor Calibration & Automated Validation** – Integrated calibration storage and optional Validation Software enhance long-term accuracy, particularly in low-chlorine environments.
- ✓ **Minimal Maintenance with ASR® Cleaning** – The Automatic Sensor Cleaning System (ASR®) removes contaminants and biofilms, maintaining long-term sensor accuracy without frequent manual cleaning.
- ✓ **STABIFLOW® ONE** – Optimized Flow Conditions– STABIFLOW® ONE flow cells ensure stable sensor placement, preventing measurement fluctuations due to changing water conditions.
- ✓ **High-Precision Sensor Technology** – NEON® ONE utilizes ZIRKON® ONE digital sensors with integrated memory and advanced diagnostics for consistent and reliable measurements.



Open Sensor Technology



ASR® – Automatic Sensor Cleaning for Reliable Measurements in Every Application
Sensor fouling caused by biofilms, scaling, and contamination is a common challenge in water quality monitoring. The ASR® (Automatic Sensor Cleaning System) ensures long-term measurement accuracy and reduced maintenance efforts across various applications by performing automated cleaning cycles on ZIRKON® ONE DIS sensors.

BUILT TO LAST – RELIABLE, SUSTAINABLE, AND COST-EFFECTIVE

Why choose NEON® ONE?

NEON® ONE is designed for long-term reliability and environmental responsibility. Its high-quality materials ensure durability in demanding water treatment environments, while advanced self-diagnostic and cleaning functions extend sensor and component lifespan. The sensors feature a replaceable electrode system, reducing electronic waste and lowering operational costs. By integrating energy-efficient components and remote monitoring capabilities, NEON® ONE minimizes maintenance efforts and supports sustainable water management practices.

Simplified Inventory and Cost Control

The modular board system and plug-and-play design of NEON® ONE significantly reduce inventory complexity and lower configuration costs. By using standardized components that can be freely combined, the system eliminates the need for numerous pre-configured variants, streamlining procurement and warehouse management.

Flexible Scalability for Future-Readiness

Expand your system with additional measurement points as needed. The universal NODE simplifies inventory management and ensures easy interchangeability, while modular and reusable electronics ensure long-term sustainability.



The NEON® ONE | NODE is a versatile and intelligent interface that enables precise and reliable sensor communication within the NEON® ONE platform. Designed for universal compatibility, it supports all ZIRKON® ONE sensors, allowing seamless integration for free chlorine, total chlorine, pH, ORP, sulfite, conductivity, and flow & temperature measurements. By performing high-accuracy analog-to-digital conversion, the NODE ensures stable signal transmission over long distances via CAN communication. With integrated diagnostics, a status LED for quick troubleshooting, and self-supervised measurement electronics, it enhances system reliability while simplifying maintenance. Its compact and robust design guarantees long-term durability and sustainability, making it a universal solution for all water quality monitoring applications.



NEON® ONE | NODE

NEON® ONE is the Smart Choice for Water Quality Management



Durability and Sustainability

NEON® ONE is designed for long-term reliability and environmental responsibility. Its high-quality materials ensure durability in demanding water treatment environments, while advanced self-diagnostic and cleaning functions extend component and sensor lifespan. The ZIRKON® ONE sensors feature a replaceable electrode system, reducing electronic waste and lowering operational costs. By integrating energy-efficient components and remote monitoring capabilities, NEON® ONE minimizes maintenance efforts and supports sustainable water management practices.



LOCAL ACCESS. GLOBAL CONTROL.

Effortless System Integration with NEON® ONE

NEON® ONE is more than just a measurement system - it's a complete data management solution for water quality monitoring. With real-time data acquisition, advanced diagnostics, and seamless connectivity, NEON® ONE ensures continuous access to critical water quality information, reducing the need for manual intervention and enabling data-driven decision-making.

Clear Insights with Intuitive Visualization

NEON® ONE combines intuitive operation with comprehensive data visualization to provide actionable insights at a glance. Monitor trends through clear graphical representations and historical data displays and adapt measurement units to your needs. Easily interpret calibration data and navigate system parameters with a user-friendly interface. Set precise alarms and thresholds to ensure optimal control and respond proactively to process changes. This unified approach ensures users of all experience levels can confidently manage their systems and improve operational outcomes. NEON® ONE offers effortless communication with SCADA, PLC, and other external control systems through integrated Modbus TCP, mA outputs, and digital signals, ensuring seamless data integration into larger infrastructure networks. Beyond water quality monitoring, mA inputs function as agnostic data channels, allowing the integration of external sensors such as pressure, flow, or other probes. This expands NEON® ONE's capabilities, transforming it into a comprehensive process management tool that collects, processes, and visualizes all relevant operational data.

The screenshots illustrate the NEON ONE software's user interface, which is designed for easy monitoring and control of water quality data. The interface includes:

- Home Screen:** Displays real-time data for TDS (0.44 mg/l), TCI (0.61 mg/l), pH (7.45), and Temperature (26.5 °C). It also shows a graph of the TDS signal over time, a control setpoint, and calibration data. Navigation buttons for Hour, Day, and Week are present.
- System Information:** Shows a table of system components and their status. Components include Neon One (System Name: INNOLAB CONTR, Locator: N/A, Company Name: Kunkze Instruments), Hub One (Hub Name: N/A, Locator: N/A, HW Config: mAOut, DI, DO), TCI (Sensor Name: TCI, Live Value: 0.64 mg/l, Raw Signal: 1.22 mg/l raw), Conductivity (Sensor Name: Conductivity, Live Value: 0.965 mS/cm, Raw Signal: 0.749 mS/cm raw), and DIS (Sensor Name: DIS, Live Value: 0.06 mg/l, Raw Signal: 0.50 mg/l raw).
- Event Log:** Lists active events. The table includes columns for Type, Start, End, and Source. Recent events include 'No Flow' (05.03.2025, 09:28:52 to 09:29:01, 0/flow-0), 'Neon1 Started' (05.03.2025, 09:28:47), 'No Flow' (05.03.2025, 09:28:41 to 09:28:45, 0/flow-0), 'Neon1 Started' (05.03.2025, 09:28:35), and 'No Flow' (05.03.2025, 09:25:18 to 09:25:26, 0/flow-0).
- Neon One Settings:** A menu with various configuration options. The options are arranged in a grid:

Language	Date & Time	Contact Information	Home Screen Settings
Device Name	Measurement Units	Network Settings	Software Update
User Level	Storage Settings		

Smart Communication and Process Control in One Platform



How can NEON® ONE simplify system integration and remote operation?

The NEON® ONE platform offers effortless access and control, whether locally or remotely, ensuring seamless system operation and integration. For on-site configuration and updates, NEON® ONE supports quick setup via QR codes, enabling direct connection through a local access point. Additionally, NEON® ONE can be integrated into local networks via LAN cable, allowing full browser-based access from any device within the network. This ensures secure and user-controlled access through individual user codes, providing a flexible and protected operating environment. With Cloud Connect®, NEON® ONE extends control to a global level, enabling real-time monitoring, configuration, and data analysis from anywhere—no additional gateway needed. Users can track historical trends, detect anomalies, ensure compliance, and optimize treatment processes with secure and reliable cloud-based integration. By combining local and remote access, NEON® ONE delivers a comprehensive connectivity solution that simplifies process management and enhances decision-making.



Cloud Connect® provides real-time monitoring, ensuring continuous visibility of water quality data from anywhere. With instant alerts & notifications, users can react immediately to critical changes, preventing system disruptions. Advanced data analysis enables trend tracking and process optimization, supporting sustainable and cost-efficient water management. Through remote access and control, operators can adjust settings, configure processes, and optimize performance without the need for on-site intervention. Built with secure and reliable network integration, it guarantees protected data transmission and controlled user access, making water quality management smarter, safer, and more efficient than ever.

ONE PLATFORM – LIMITLESS POSSIBILITIES

How can NEON® ONE simplify system integration and remote operation?



Seamless Connectivity to Cloud Connect®

NEON® ONE connects to Cloud Connect® via LAN or GSM modem, enabling real-time remote monitoring and control. With Ethernet connectivity, multiple NEON® ONE devices can be networked together, ensuring secure data transmission and centralized access - no additional modem required.



Local access point

The Local Access Point allows direct system access without an external network connection, ensuring fast and secure on-site management.

- ✓ Upload and download settings
- ✓ Download measurement data
- ✓ Upload Software Update



Effortless Access Within Your Local Network

NEON® ONE can be accessed directly within a local network via Ethernet, allowing users to monitor data, adjust settings, and manage devices from any connected computer or tablet. Multiple NEON® ONE units can be networked for centralized control, ensuring secure and efficient system management -all without the need for an internet connection.

How does NEON® ONE adapt to different applications?

The NEON® ONE platform is a versatile and intelligent water quality monitoring system, designed for precise measurement, seamless automation, and real-time data access. Whether drinking water, swimming pools, industrial water treatment, or process control, NEON® ONE delivers reliable and scalable solutions tailored to your application. With its modular architecture, NEON® ONE allows flexible sensor integration, multiple communication options, and advanced automation functions – ensuring efficiency, accuracy, and ease of operation.

Drinking Water

Ensuring safe and high-quality drinking water requires continuous monitoring of total chlorine, free chlorine, and pH. NEON® ONE provides accurate measurement and reliable data transmission, integrating seamlessly with SCADA/PLC systems for regulatory compliance. With Cloud Connect®, measurement data can be logged, analyzed, and reported remotely, ensuring full transparency and compliance tracking from anywhere.



Swimming Pools

Maintaining balanced water chemistry is essential for hygiene, swimmer safety, and disinfection efficiency. NEON® ONE continuously monitors free chlorine, pH, ORP, total chlorine, or conductivity, while offering flexible dosing control via mA, digital outputs, or relays. The ASR® automatic sensor cleaning system ensures consistent measurement accuracy by preventing biofilm and scaling, while Cloud Connect® enables remote monitoring and reporting, allowing operators to track water quality and system performance in real time.



ONE SYSTEM, COUNTLESS POSSIBILITIES

NEON® ONE MEETS THE UNIQUE CHALLENGES OF VARIOUS INDUSTRIES, DELIVERING ACCURACY AND EFFICIENCY

Industrial & Process Water

Industrial applications demand precise process control and stable chemical dosing to maintain efficiency, compliance, and operational safety. NEON® ONE provides real-time monitoring and automation capabilities, ensuring optimized treatment efficiency while reducing manual intervention. With multi-parameter measurement options, including disinfectants, pH, conductivity, and ORP, it supports complex water treatment processes across various industries.

Seamless SCADA and PLC integration via Modbus TCP and mA outputs allows for automated process control and real-time adjustments. Additionally, agnostic mA inputs enable the integration of external sensors such as pressure, flow, or other probes, providing deeper insights into system conditions. With Cloud Connect®, operators can remotely access data, analyze trends, and receive alerts, ensuring continuous process optimization and compliance with industry regulations.

Food & Beverage Industry

Water quality is critical in the food and beverage industry, where strict hygiene standards and precise process control are essential for product safety and regulatory compliance. NEON® ONE provides real-time monitoring and automation capabilities, ensuring consistent water quality for ingredient water, cleaning processes, and wastewater treatment, while minimizing manual intervention. With multi-parameter measurement options, including disinfectants, pH, conductivity, and ORP, it supports safe and efficient water management across various production environments. Its high-precision sensor technology ensure stable measurements, even in demanding applications .



Tailored Solutions for Every Water Treatment Challenge

Reverse Osmosis Pre-Treatment

Protecting RO membranes requires accurate chlorine monitoring in chlorine-free environments to prevent membrane damage while ensuring effective pre-treatment. NEON® ONE offers Validation Software, allowing automated switching to chlorinated water for sensor verification, ensuring reliable measurement accuracy even in low-chlorine conditions. In addition to chlorine monitoring, sulfite measurement is essential for detecting and controlling dechlorination agents.



NEON® ONE supports ZIRKON® ONE SULFITE sensors, providing precise sulfite monitoring to optimize pre-treatment processes. With its seamless data integration, remote access, and predictive diagnostics, NEON® ONE helps operators maintain membrane integrity, improve efficiency, and reduce downtime in RO applications.



ZIRKON® ONE SULFITE – Precise Sulfite Monitoring for Reliable Dechlorination

The ZIRKON® ONE SULFITE sensor ensures accurate control of sulfite dosing, preventing overdosing that could negatively impact system equipment. Designed for dechlorination processes in reverse osmosis pre-treatment and industrial water treatment, it provides real-time monitoring and precise regulation of dechlorination agents such as sodium bisulfite.

With high measurement accuracy and exceptional linearity, the sensor guarantees stable and interference-free readings, ensuring process efficiency and equipment protection. Integrated into the NEON® ONE platform, it supports automated dosing control, remote monitoring, and seamless data integration for optimized dechlorination performance.

NEON ONE® – CLEAR. CONTROL. CONNECT.

Get Clear insights, total Control, and seamless Connectivity

Clear

Precise, real-time water quality monitoring with intuitive data visualization. NEON® ONE ensures compliance by providing clear insights into key parameters like chlorine, pH, ORP, and more. Smart alarms and guided calibration simplify decision-making.

Control

Full process optimization with automated dosing, seamless sensor integration, and customizable alerts. NEON® ONE's modular system adapts to your operational needs, ensuring consistent compliance while protecting assets.

Connect

Anywhere, anytime monitoring via local access, local network, and Cloud Connect®. Secure remote access and cloud-based logging provide complete traceability for audits, regulatory reporting, and proactive maintenance.



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