

Process Analysis Systems

Chem

Energy

Pharm

Food

Water

Stratos® Pro

Extremely robust process analyzers with unique color-coded user interface, for all common analog and digital sensors

Process analytics with flying colors

The 2- and 4-wire devices in the Stratos® Pro series offer a wide range of innovative features. Alongside the high-contrast, easily legible widescreen display, the series excels with unique operator guidance featuring functional colored backlighting.

All devices are designed for connection to any customary analog or digital sensors (including contactless ones) with significantly enhanced predictive diagnostics. With their innovative enclosure technology, they are ideal for virtually any environment in both hazardous and safe areas.

Function superiority

From the wireless service interface to the complete HART communication system, the Stratos® Pro series offers a wide range of reliable functions for 4- and 2-wire devices. The devices can be used in multidrop mode and are certified for the handheld and asset management systems of leading manufacturers.

Unrivalled circuit technology ensures low self-heating and an extremely long service life.



Warranty
3 years!

Warranty

*Defects occurring within 3 years from delivery date shall be remedied free of charge at our plant (carriage and insurance paid by sender).
Sensors and accessories: 1 year*



Facts

- extremely robust, UV-resistant molded enclosure (IP 67)
- high-contrast widescreen display with color-guided backlighting
- protective pane made of safety glass
- intuitive operation with easy-to-understand icons and running plain-text ticker line
- logbook (200 entries)
- HART communication
- wireless service interface (not need to open the enclosure)
- 2 current outputs
- 2 parameter sets
- 2 digital inputs:
 - external HOLD release
 - external parameter set selection
- one analog input (4 to 20 mA) e.g. for external pressure compensation
- automatic sensor identification
- sensor diagnostic with wear indication, remaining lifetime, CIP/SIP counter, and adaptive calibration timer
- operation in hazardous areas (explosion-protected for gas and dust):
 - 4-wire: Zone 2 (FM, CSA Class I, Div 2, GOST, NEPSI, and KOSHA);
 - 2-wire: Zone 1 (FM, CSA Class I, Div 1, GOST, NEPSI, and KOSHA)
- easy wall, post/pipe, or panel mounting
- 3-year warranty

		Stratos® Pro		Stratos® Pro	
		4-wire devices		2-wire devices	
		Safe area	⊕ Zone 2	Safe area	⊕ Zone 1
analog	pH measurement	A401N-PH	A401B-PH	A201N-PH	A201X-PH
	Contacting conductivity measurement	A401N-COND	A401B-COND	A201N-COND	A201X-COND
	Multi-channel conductivity measurement	A401N-CC	X	A201N-CC	X
	Non-contacting conductivity measurement	A401N-CONDI	A401B-CONDI	A201N-CONDI	A201X-CONDI
	Dissolved-oxygen measurement	A401N-OXY	A401B-OXY	A201N-OXY	A201X-OXY
	digital	pH measurement, Memosens®	A401N-MSPH	X	A201N-MSPH
pH/pH multi-channel measurement, Memosens®		A401N-MSPH/MSPH	X	X	X
pH/oxy multi-channel measurement, Memosens®		A401N-MSPH/MSOXY	X	X	X
Contacting conductivity measurement, Memosens®		A401N-MSCOND	X	A201N-MSCOND	A201X-MSCOND
Non-contacting conductivity measurement, digital		A401N-MSCONDI	X	A201N-MSCONDI	A201X-MSCONDI
Dissolved-oxygen measurement, Memosens®		A401N-MSOXY	X	A201N-MSOXY	A201X-MSOXY

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New operating concept

The Stratos® Pro series offers a completely new and especially user-friendly operating concept. Studies have shown that operator

errors more frequently lead to downtime than hardware defects or malfunctions. A user-friendly design and intuitive operation

has therefore been given the highest priority in the new series.

Unique color-coded user interface

The color-guided user interface on a backlit widescreen display guarantees maximum operating safety for 4- and 2-wire devices. The unique, functional colored backlighting of the Stratos® Pro display changes between 6 different colors to clearly signal operating states.

The normal measuring mode is white. Information texts appear on a green screen and the diagnostic menu appears on turquoise. The orange HOLD mode is quickly visible as is the magenta screen which indicates asset management messages for predictive diagnostics – such as maintenance

request, pre-alarm, and sensor wear. The alarm status has a particularly noticeable red display color and is also signaled by flashing display values. Unreliable entries or false passcodes cause the entire display to blink red so that operating errors are noticeably reduced.



white: normal measuring mode



red blinking: alarm, errors



orange: HOLD mode



magenta: maintenance request



turquoise: diagnostics



green: info texts

Optimum legibility

A pin-sharp and high-contrast LC display provides optimum legibility, even in the most difficult lighting conditions. The easy-to-understand, icon-driven user interface ensures intuitive use. Instead of pixelated

elements which are sometimes difficult to identify, the display utilizes high-resolution, self-explanatory icons. Longer text displays are scrolled horizontally in large, clearly legible font: a scrolling ticker line is more

easily and reliably comprehended than text in jumping lines.



Robust and Reliable

New industry design to be used for applications even under the harshest of ambient conditions: Fully encapsulated and protected in shatter-proof and corrosion-resistant plastic enclosure with outdoor approval rating.

Hard to beat

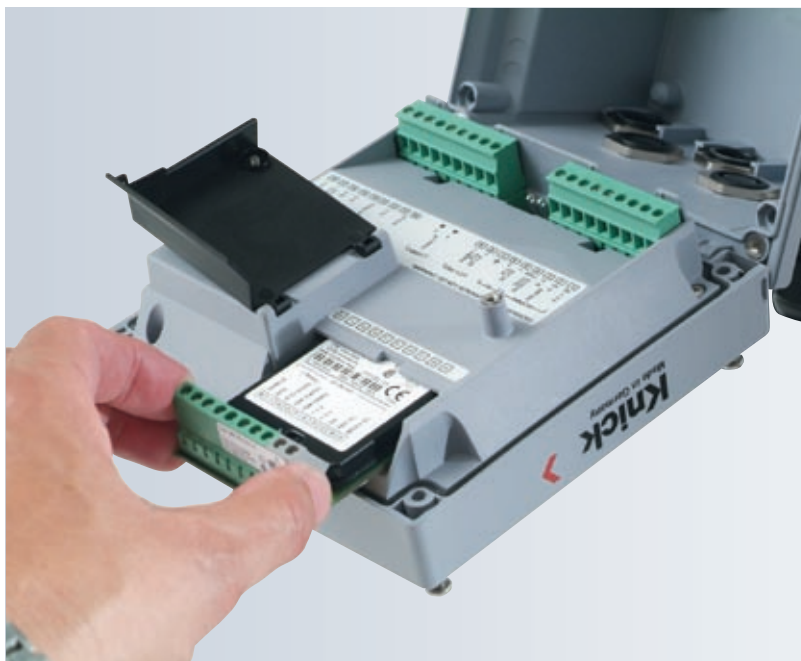
The reinforced and UV-resistant plastic enclosure of the Stratos® Pro supports the product functionality. There are neither prominent control elements nor those with a high mechanical load to be found on the virtually plane, dirt-proof front panel. Injection molded, directly sealed keys

are made from high-quality EPDM so that it is no longer necessary to stick films, which previously had to perform a sealing function, onto the front of the device. The high IP 67 rating is retained under all conditions – safe operation of the 2-wire versions is guaranteed in the range from –20 °C to +65°C. This also applies without exception to operation in hazardous locations.

All-round resilience

The display window of the Stratos® Pro is connected directly to the plastic enclosure during the innovative molding process. It is made from

reinforced safety glass, is scratch-resistant and UV resistant. All the device's electronics are completely encapsulated in the door module: there are no exposed PCBs. The large rear unit can be mounted separately. All electrical connections are made by means of screw terminals in the door unit, so that if the door module is replaced, the complete cable guide can be retained in the rear unit.



All the electronics in a Stratos® Pro are encapsulated in the door module of the device. Exchangeable modules allow for different process parameters.

For up-to-date information, please visit www.knick.de

Knick 

For all high-quality sensors

pH measurement

- for analog, digital and/or contactless pH sensors
- for combination electrodes as well as separate glass and reference electrodes
- a broad selection of temperature sensors (Pt 100, Pt 1000, NTC 30 kohms, NTC 8.55 kohms, or Balco 3 kohms)
- for all standard ORP metallic electrodes
- for customary ISFET sensors

Contacting conductivity (Cond)

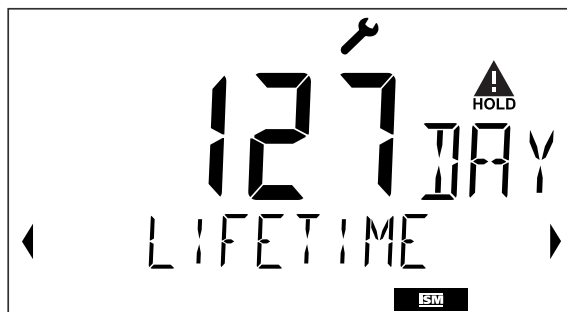
- for all customary 2- and 4-electrode sensors
- cell constant selectable from 0.005 to 20 cm⁻¹
- selectable temperature sensors Pt 100, Pt 1000, NTC 30 kohms, NTC 8.55 kohms

Oxygen (Oxy)

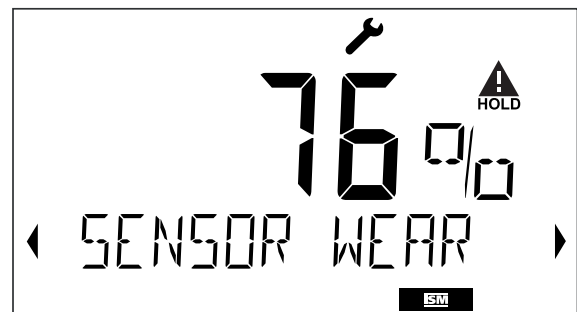
- for commercially available, amperometric sensors with or without polarization voltage
- temperature sensors NTC 22 kohms/NTC 30 kohms

Non-contacting (inductive) conductivity (Condl)

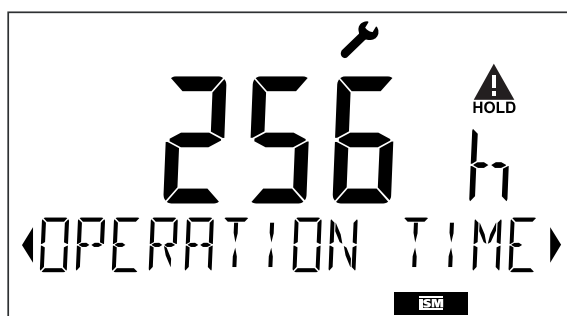
- for a variety of conventional European and US sensors
- temperature sensors Pt 100, Pt 1000 and NTC 30 kohms



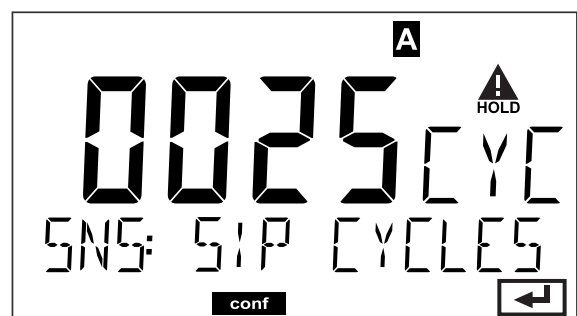
Remaining sensor lifetime



Sensor wear



Sensor operating time



CIP/SIP counter

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Simple Installation

- wall, post/pipe, or panel mounting
- all parts are easily accessible
- large terminal compartment
- pre-installation of rear unit possible
- also suitable for rigid metallic conduits
- replaceable screw terminals
- replacement of electronics without new cabling

ZU 0274 pipe-mount kit

For assembly on vertical or horizontal pipes or posts.



ZU 0737 protective hood

Additional protection from direct weather exposure and mechanical damage.



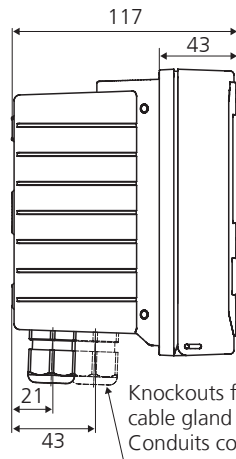
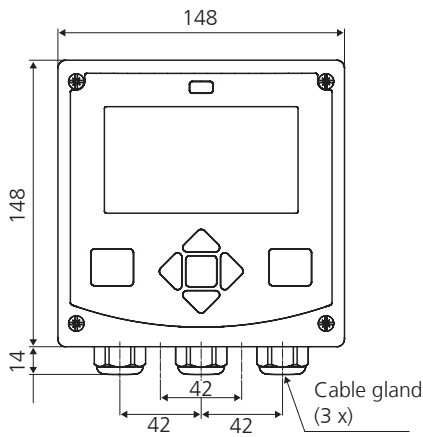
ZU 0738 panel-mount kit

For mounting in standardized panel cutout 138 x 138 mm (DIN 43700), sealed against panel.

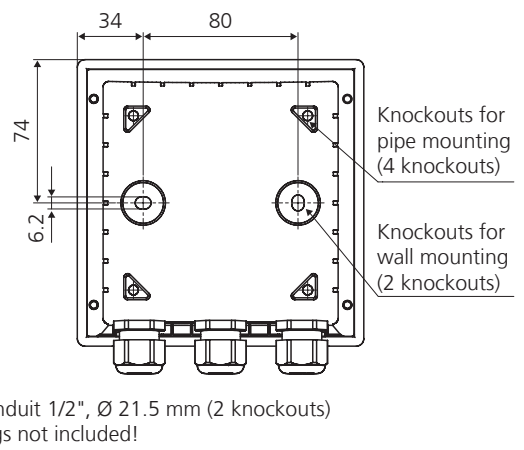


Dimension Drawings

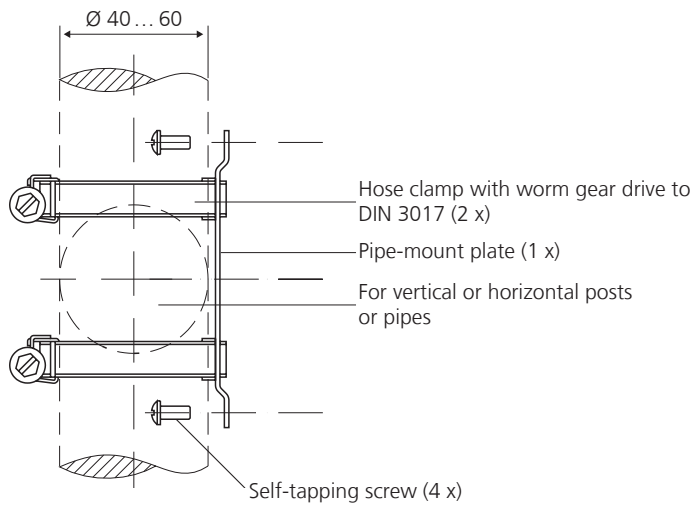
Front and side view



Rear side

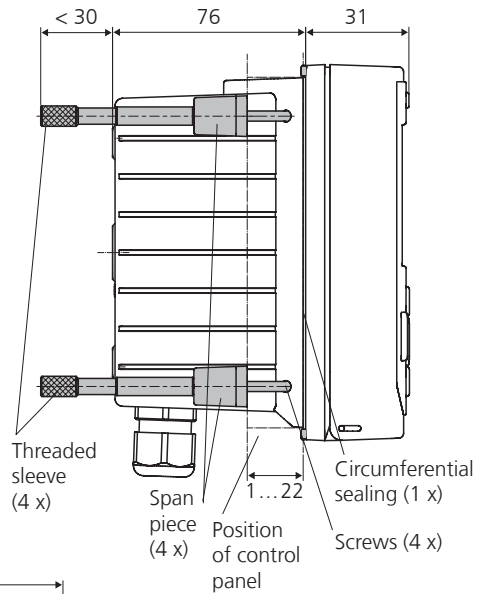


Pipe-mount kit ZU 0274



Panel-mount kit ZU 0738

Control panel cutout 138 x 138 mm (DIN 43700)



Protective hood ZU 0737

