Multiparameter analyzer for analog, digital and Memosens sensors

# Stratos **Evo**





# Stratos

# The Multi-Talents for Process Analytics

With its exceptional range of functions and application-oriented design, Stratos is well-established in the entire chemicals industry, in process and power plant engineering and in the pharmaceutical and biotechnology industries.

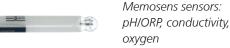
Suitable for all conceivable indoor and outdoor scenarios, the Stratos brand is today a synonym for innovation and reliability in process applications around the world – for example in starch production in Germany,

sugar manufacturing in Brazil, cooling water monitoring in France or medicine production in Belgium.

The next stage of evolution for analyzers: Stratos Evo. A multiparameter device for operation with digital and analog sensors.

## Stratos **Evo**

Multiparameter device with HighPower sensor supply





Digital toroidal conductivity sensor



Analog sensors: pH/ORP, conductivity, oxygen



Digital optical oxygen sensor

### One device for all parameters and all sensors

Depending on requirements, Stratos Evo can be simply switched over to different process variables.

The integrated HighPower sensor supply enables the operation of optical oxygen sensors which are immune to interference.

For measurements with analog sensors, Stratos Evo can be adapted to the desired process variable using measuring modules.







#### The digital platform

The digital functionality eliminates a large number of interferences which can occur with analog devices. The use of sensor cables with a length of up to 100 m and the advanced diagnostics options are just two advantages of the digital technology.

### Power supply for external 2-wire transmitters

Another major benefit of the High-Power sensor supply is the option to supply external 2-wire transmitters, e.g. pressure or flow transmitters. The respective signal can be displayed and processed via the 4 to 20 mA input.

#### Device status at a glance

Stratos Evo features intuitive operation with color-coded user guidance. The high-contrast widescreen display indicates the respective operating states in six different colors: Normal measuring mode is backlit in white while information mode displays are illuminated in green. The diagnostics menu, maintenance request and the hold mode are each indicated by unique colors. The alarm status is indicated in a vibrant red, a flashing red display is a sign of impermissible entries or incorrect passcodes. Scrolling plain text messages and selfexplanatory icons simplify operation.

# Explosion protection for application in Zone 2

The special circuit technology ensures low self-heating and an extremely high reliability.

Stratos Evo is certified to ATEX / IECEx and approved for use in Zone 2 hazardous environments.







**IP 67** 

**NEMA 4X** 



### Stratos **Evo**

### Measuring modules for operation with analog sensors

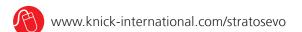
By simply plugging in a measuring module, Stratos Evo can be extended to work with analog sensors.

#### Easy assembly

Stratos Evo is suitable for wall, pipe or panel mounting. The rear unit can be pre-assembled; all parts are easily accessible thanks to the large terminal compartment.









### **Facts**

- Multiparameter analyzer for analog and digital sensors as well as for contactless digital Memosens sensors
- One device for pH/ORP, conductivity or oxygen (configurable)
- Measuring modules for operation with conventional analog sensors
- HighPower sensor supply for
  - operating digital optical oxygen sensors
  - supplying external2-wire transmitters
  - measuring and monitoring the flow using an external flow sensor
- Pressure correction for oxygen measurements
- 2-channel measurement: Memosens (pH/pH or pH/Oxy) or analog (Cond/Cond)

- Comprehensive features and flexibility enable universal application
- Signaling operating states by a multi-color backlit display
- Protective pane made of safety glass
- Intuitive operation with easy-to-understand icons
- Logbook (200 entries)
   AuditTrail
- Enhanced sensor diagnostic with wear indication, remaining lifetime, operating time, CIP/SIP counter and adaptive calibration timer
- HART communication
- IECEx and ATEX Zone 2 approvals
- Extremely robust, UV-resistant molded enclosure (IP 67)
- VariPower broad-range power supply for global use





### Memosens

#### Interference-free coupling

The Memosens inductive sensor connector system transfers both energy and data without contact between electrochemical sensors and analyzers.

#### **Pre-calibrated sensors**

By using pre-calibrated sensors, Memosens ensures maximum availability and lower maintenance requirements at the point of measurement.

#### **Intelligent diagnostics**

Memosens allows saving and analyzing process-related data directly in the sensor.

### Memosens. The benefits at a glance:

- Plug & Measure –
   Sensor replacement in seconds with pre-calibrated sensors
- Simple and safe plugging with bayonet coupling
- Contactless, digital data transfer
- All key data available in the sensor
- Longer sensor service life
- Error-free measurements, even in the toughest conditions
- Just one cable system for all sensors
- Measured values not influenced by excessively long cables







# Stratos **Evo**

### Product Range





Protective hood

digital basic unit, Ex Zone 2

pH/ORP module	MK-PH 015N
pH-/ORP module, Ex Zone 2	MK-PH 015B
COND module	MK-COND 025N
COND module, Ex Zone 2	MK-COND 025B
CONDI module	MK-CONDI 035N
CONDI module, Ex Zone 2	MK-CONDI 035B
OXY module	MK-OXY 045N
OXY module, Ex Zone 2	MK-OXY 045B

### Stratos Evo 2-channel modules, analog

COND/COND module	MK-CC 065N

#### Stratos Evo 2-channel modules, Memosens

Memosens module MK-MS 095N 2nd channel (pH/pH, pH/OXY)

#### **TAN options**

HART communication	SW-A001 SW-A002
Logbook	
Extended logbook (Audit Trail)	SW-A003
Oxygen trace measurement	SW-A004
Current input and 2 digital inputs	SW-A005
ISM digital (for pH and oxygen process parameters)*	SW-A006
Operation with Pfaudler pH sensors	SW-A007
Accessories	Order no.
Pipe-mount kit	ZU 0274
Panel-mount kit	ZU 0738
Protective hood	ZU 0737

<sup>\*)</sup> MK-PH or MK-OXY module required



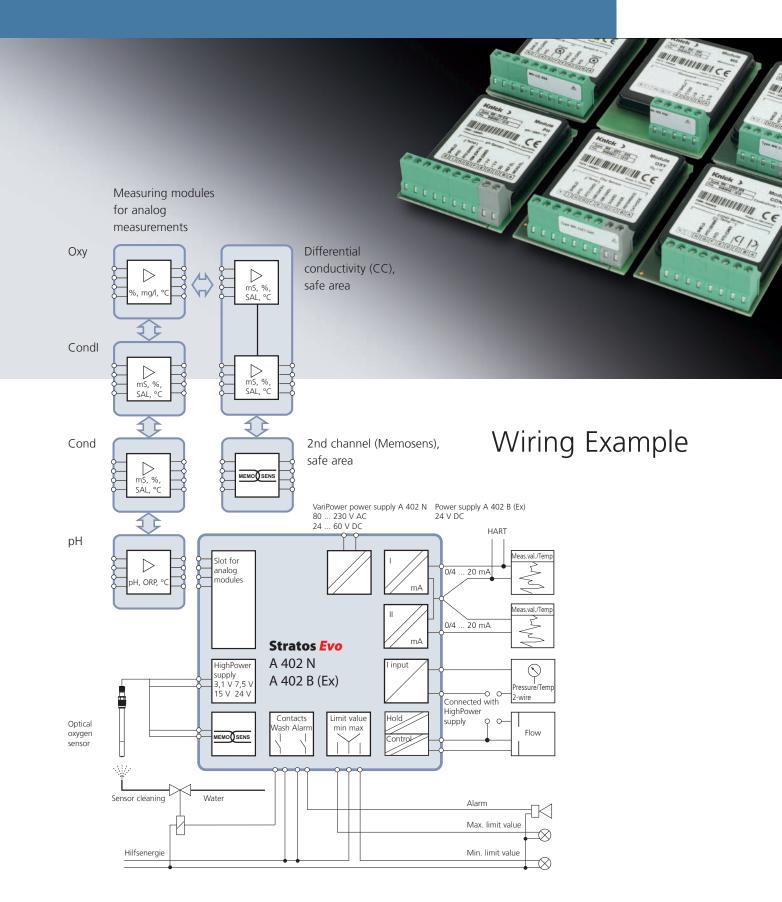
Measuring module

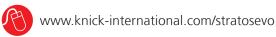


Post/pipe mounting



Panel mounting







Interface Technology Portables **Laboratory Meters** Fittings

#### Knick Elektronische Messgeräte GmbH & Co. KG

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### **Stratos**

The Art of Expertise

#### Stratos **Evo**

4-wire devices, analog, digital and Memosens

#### Stratos **Pro**

2-wire devices, analog, digital and Memosens

#### Stratos MS

4-wire devices, digital and Memosens

#### Stratos *Eco*

4-wire devices, analog