

# PowerMon S

The PowerMon S analyzer is a compact closed multi-component measuring system. It bases on the spectroscopic measuring principle. The usability could be enhanced perceptible. Compared to the DiaMon the costs for this analyzer has been reduced drastically.

- One PowerMon S replaces several single-parameter analyzers
- Pre-calibrated for quick and easy installation: needs only a simple on-site adjustment to local sample conditions
- Connection of external physical sensors and actuators
- Simple maintenance
- Low reagent consumption
- Long maintenance intervals
- Enhanced remote diagnostics and modem control referring to DiaMon



## Applications

- Measuring of Total N and Total P
- Measuring of DOC, CSB
- Measuring of  $\text{NH}_4^+ \text{-N}$  /  $\text{NO}_3^- \text{-N}$  /  $\text{PO}_4^{3-} \text{-P}$
- For waste water treatment plants, rivers, lakes and coastal waters

In North America:

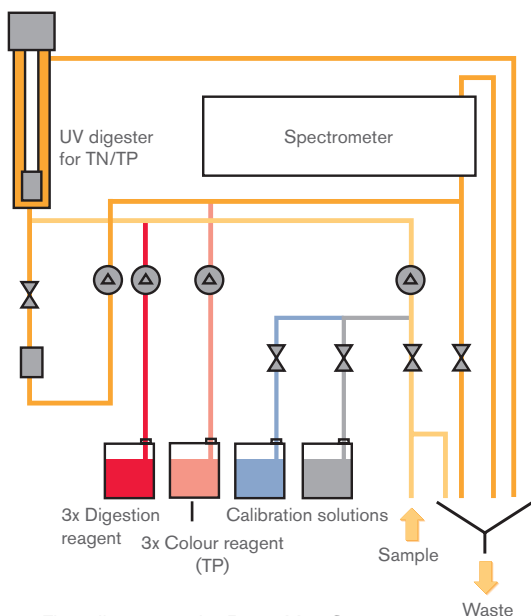


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## Advantages

- Simple operation with the well-known PowerMon touch screen
- CAN bus, Profibus DP, Modbus RTU and TCP, LAN and modem
- Better Remote Control facilities in comparison with the previous model
- The connection of more sensors by transmitters

# PowerMon S



Flow diagram of the PowerMon S

The relationship between the concentration of nitrogen compounds in waste water and their influence on the eco system has been increasingly realised in the last few years.

Phosphorus is present in various forms both in natural water sources and in waste water: it may take the form of ortho-phosphate, inorganic polyphosphates or organic phosphorus compounds.

As a result, waste water treatment plants aim to remove as much of the nitrogen and phosphorus content as possible before the treated water is returned to nature. Monitoring total N and P in the final effluent is an essential part of the control process

The PowerMon S is the ideal instrument for providing a continuous measurement of these important parameters.

# Technical Data

## MEASURING METHODS

potentiometric

## MEASURING CYCLE

at least 6 min.

## MEASURING RANGE

NO <sub>3</sub> <sup>-</sup>	0 - 1	to 0 - 500 mg N/l
F <sup>-</sup>	0 - 1	to 0 - 1.000 mg/l
Cl <sup>-</sup>	0 - 0,1	to 0 - 10.000 mg/l
NH <sub>4</sub> <sup>+</sup>	0 - 2,5	to 0 - 1.000 mg/l
K <sup>+</sup>	0 - 1	to 0 - 10.000 mg/l

Further parameters and measuring ranges on request.

## PRECISION

typ. < 5% of measuring range (end of value)

## DRIFT

typ. < 1% of measuring range (end of value)

## REAGENT SUPPLY

for approx. 3 weeks

## NUMBER OF MEASURING POINTS

max. 6

## OUTPUT SIGNAL

0/4-20 mA  
max. load 500 OHM  
characteristic curve:  
linear/logarithmic  
galvanically isolated

## INTERFACES

USB / Ethernet  
Option:  
Modem: analog, GSM, ISDN, UMTS  
Profibus DP, Modbus RTU and TCP

## RELAY CONTACTS

4/12 potential free contacts  
free allocable  
(e.g. alarm contact)

## DIGITAL INPUTS

4/12 e.g. activating and deactivating of measuring points, system control

## SAMPLE

pressure-free  
Temperature : 15 - 45°C  
(288 - 308 K)  
Flow : 3 - 10 l/h  
free from suspended matter and oil  
Connection : tube, flexible (ID 1,5 - 3 mm)

## DRAIN

pressure-free  
tube, flexible (ID 10 mm)

## POWER SUPPLY

85...264 VAC at  
47...63 Hz

## POWER CONSUMPTION

~ 42 VA (max. 90 VA)

## ENVIRONMENTAL

### TEMPERATURE

15 - 35°C (288 - 308 K)

### INSTALLATION

wall-mounted

### PROTECTION CLASS (EN 60529)

IP 65 (electronics)  
IP 54 (with housing)  
IP 21 (with jacket)

### WEIGHT

housing with reagent cabinet  
53 - 60 kg without reagents

### DIMENSIONS

(HEIGHT X WIDTH X DEPTH)  
housing: 700x600x320 mm  
with reagent cabinet:  
1100x600x354 mm

For further information please contact our technical support



NORTH AMERICA DISTRIBUTION



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