OPUS

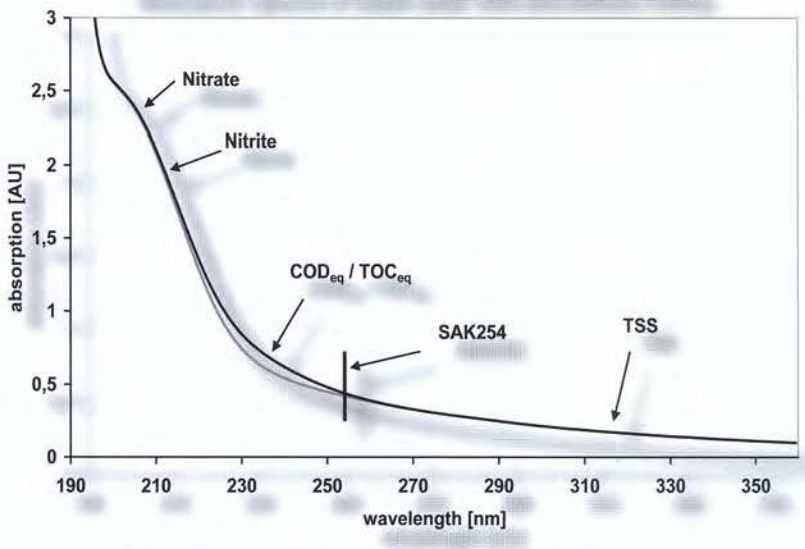
UV/VIS spectral analyser

OPUS is the newest generation of spectral photometer for online analysis of organic loads and nitrogen components. Using full spectrum analysis, OPUS is able to give reliable readings for various parameters like N03-N, N02-N, CODeq, BODeq, TOCeq, TSSeq and even HS^-. Using TriOS unique police function to monitor unexpected spectral signatures, the OPUS can trigger alarms and protect your application. OPUS comes with the new innovative TriOS G2-interface with easy to use web interface: within minutes you can configure your OPUS to fit to your need. Select from a variety of interfaces and protocols the one which fits to your needs. Select outputs, enter calibration factors, get housekeeping information from your OPUS, or start measurement. Integration into existing systems has never been that easy. The built-in data logger and analysis module allows even stand-alone applications in the field. With wireless network accessories you can control your OPUS by simply using your smartphone or any other device without the need of special apps.

Applications:

- WWTP
- environmental monitoring
- drinking water monitoring
- industrial applications

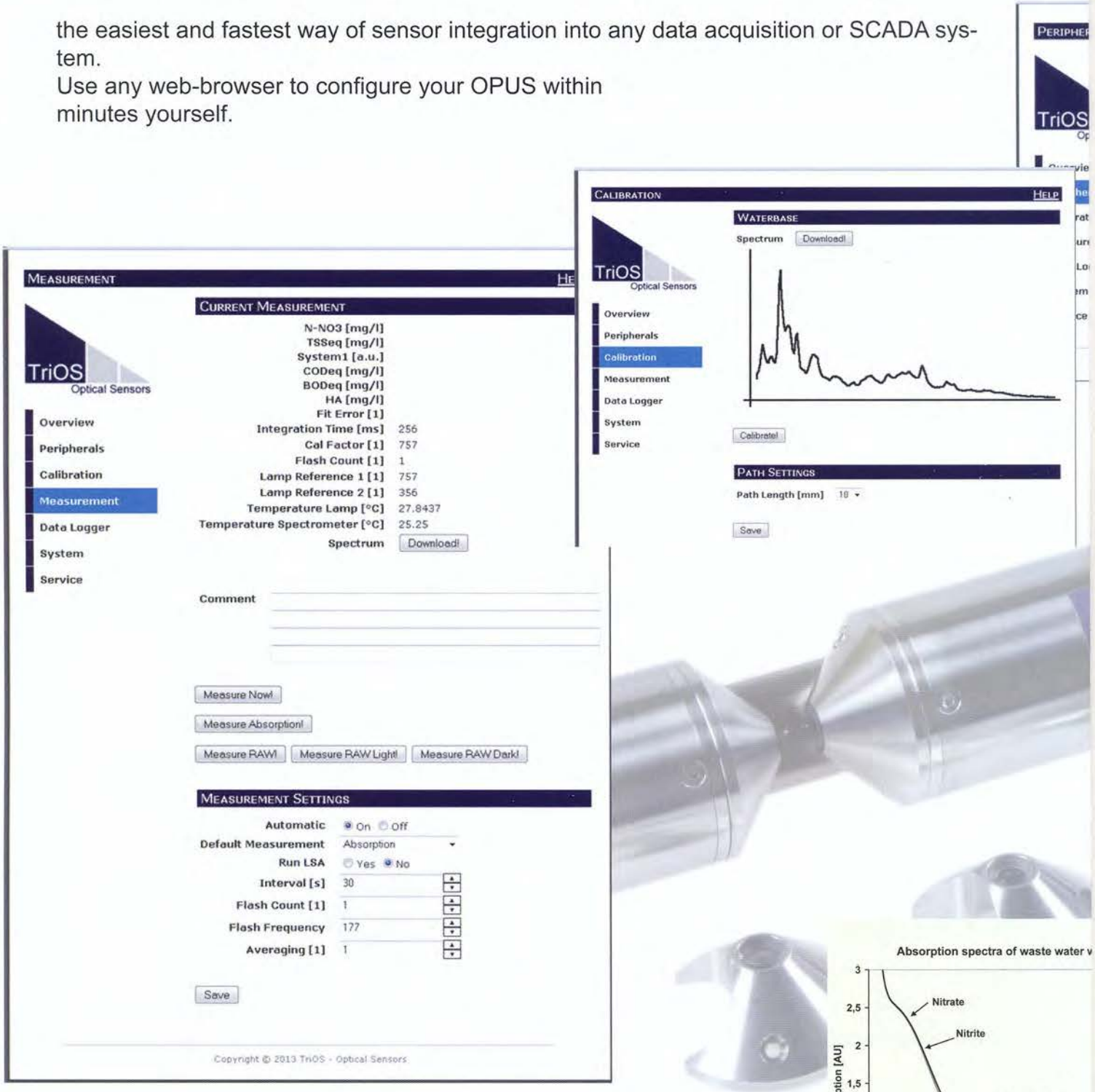
Absorption spectra of waste water with and without CODeq



TriOS
Optical Sensors

TriOS G2-Interface

the easiest and fastest way of sensor integration into any data acquisition or SCADA system.
Use any web-browser to configure your OPUS within minutes yourself.



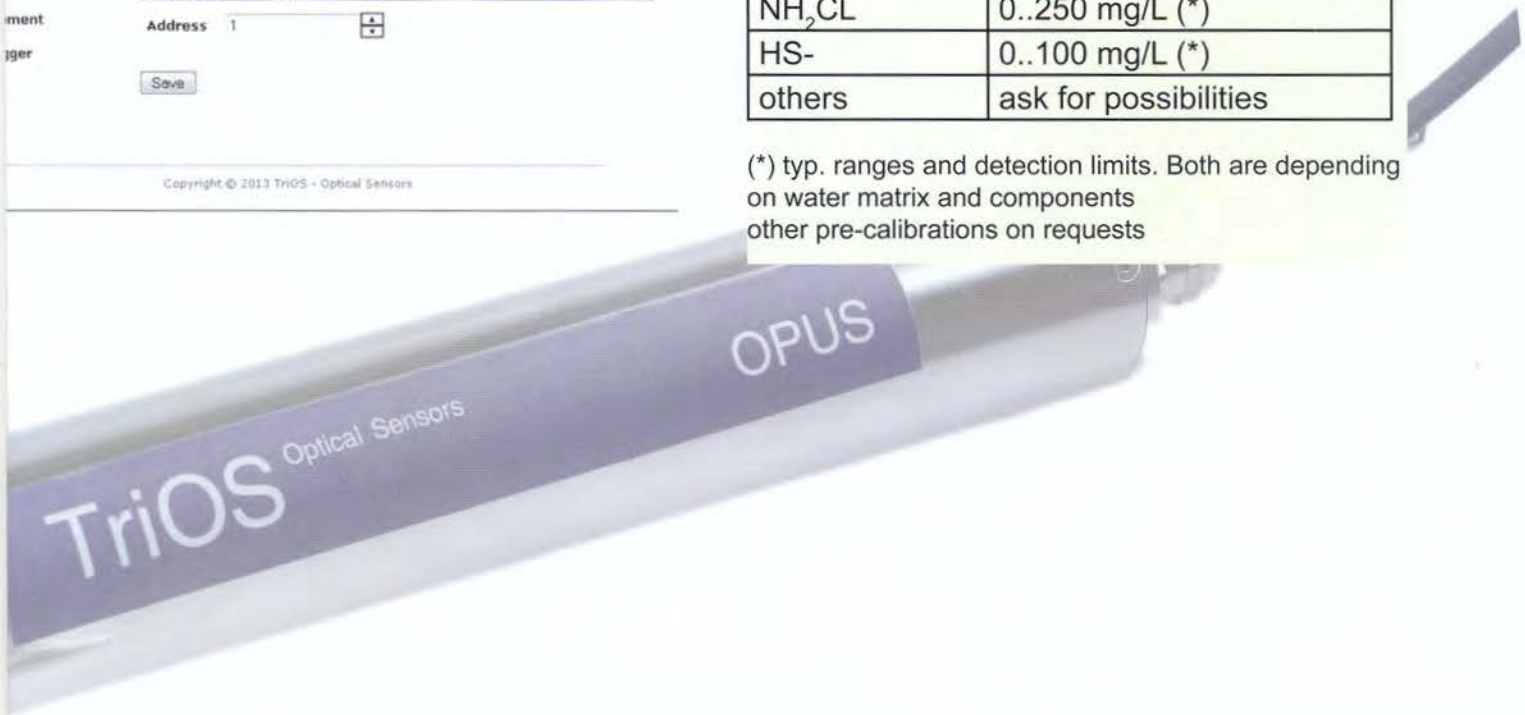
Let the OPUS watch for pollutions or accidents: The built-in ‚police'-function (option) can trigger alarms if spectral signatures changes unexpectedly

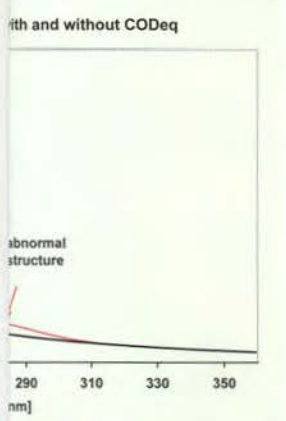
TriOS Optical Sensors

parameter:

NO3-N	0..100 mg/L (*)
NO2-N	0..200 mg/L (*)
CODeq	0..5,000 mg/L (*)
TOCeq	0..500 mg/L (*)
BODeq	0..5,000 mg/L (*)
DOCeq	0..1,000 mg/L (*)
NH_2CL	0..250 mg/L (*)
HS-	0..100 mg/L (*)
others	ask for possibilities

(*) typ. ranges and detection limits. Both are depending on water matrix and components
other pre-calibrations on requests





product varities:

pathlength	wavelength	material	interface	connector
1 mm*	UV 200..350nm	VA stainless steel	D RS232 RS485	C fixed 10m cable with M12
2 mm*				
5 mm*	UV/VIS 200..720nm			
10 mm*				
* user changeable by spareparts		Ti titanium	A 2x 4..20mA 0..5VDC 0..10VDC	S SUBCONN 8pin micro

OPUS

Info

	OPUS
detector type	high-end miniature spectrometer, 256 channels UV: 200-360nm @ 0.8nm/pixel UV/VIS: 200-720nm @ 2.2nm/pixel
light source	Xenon-flashlamp
telemetry interface	network TCP/IP RS-232/RS485, various protocols (e.g. Modbus, TriOS, ...)
power supply	9 - 28 VDC
housing	stainless steel (1.4571) or titanium
optical pathlengths	1mm, 2mm, 5mm or 10mm
dimensions	d= 48mm, length= 460mm (without connector)
depth range	300m
connector	SubConn micro series 8 pin male or fixed cable with M12 industrial connector
operation temperature	0 - 40°C
	internal temperature sensor
memory	2 GB internal micro-SD card
cleaning	nano coated lenses, airblast

- low power consumption
- integrated temperature compensation
- easy to use

- nano coated lenses
- airblast cleaning
- customizable path length

A wide range of accessories is availabe (flowcells, panels, power supplies, handheld devices...)