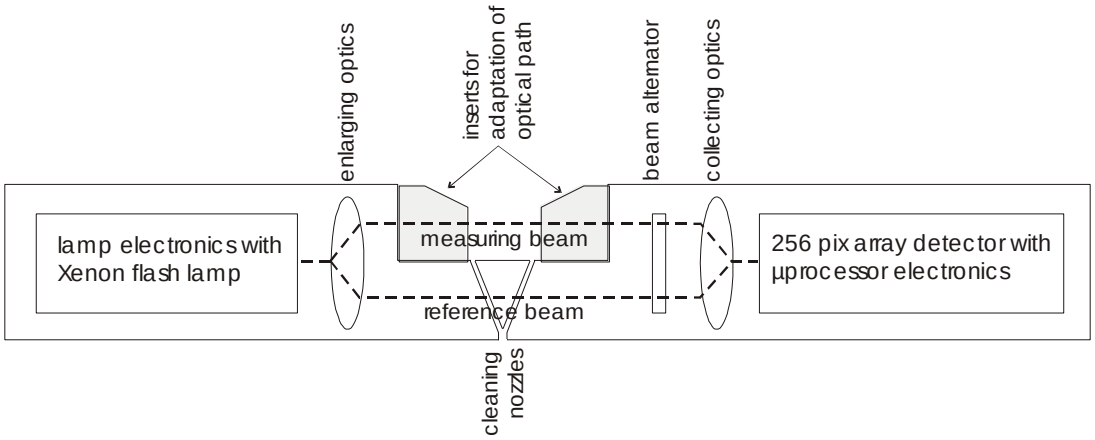
Measurement conditions

- Outside installation, opposed to changing climate
- Continental spring till autumn (May-Oktober)
- Measurements conducted indoor

Spectrophotometry

The spectro::lyser™ by the Austrian company s::can Messtechnik GmbH (see fig.) is an submersible in-situ operating UV/VIS spectrometer probe with a measuring range of 190-720 nm. It is based on a double-beam principle, whereby the light is split into two equal beams, one travelling through the liquid sample while the second beam continues on a parallel pathway inside the instrument, acting as a reference. The light source providing the necessary wavelengths is a built-in xenon flashlight. Later, a 256-pixel array detects the intensity of the transmitted light and the processor computes the transmittance in percent



Photometry

The *Hach-Lange DR-1900* photometer was used to measure the removal potential of ammonium NH_4–N (LCK 303, 2 – 47 mg/L), nitrate NO_3–N (NitraVer® 5 nitrate reagent powder pillow, 0.3 – 30.0 mg/L) and phosphate PO_4^{3-} (PhosVer® 3 phosphate reagent powder pillow, 0.02 – 2.50 mg/L) for each of the four prototypes, plus the reference channel with substrate only.

The Green INSTRUCT project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 723825.