UV80 UV254 Abs Sensor

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ELECTRO-CHEMICAL DEVICES

The UV80 Organic Load Sensor

- **UV 254 nm Optical Technology**
- Utilizes the state-of-the-art UV 254 nm optical absorbance technology to measure organics in water
- Many dissolved organic substances have spectral characteristics capable of absorbing UV light at the wavelength of 254 nm. A UV source produces UV light radiation that passes through the optical path. The receiver analyzes the UV pulses at two different wave lengths, a measurement wavelength (254 nm) and a reference wavelength which is not influenced by the presence of organic compounds.

The UV80 Organic Load Sensor

- Sensor Design with Digital Communication Calibration data is stored in the sensor allowing field installation of a pre-calibrated sensor, Detachable cable simplifies the installation of pre-calibrated sensors.
- Advanced Wiper Design Direct insertion UV sensors must have an advanced automated wipe system to avoid continuous manual maintenance cleanings
- • Drinking water • Industrial wastewater • Municipal wastewater • Pollution monitoring of surface waters

The UV80 Organic Load Sensor

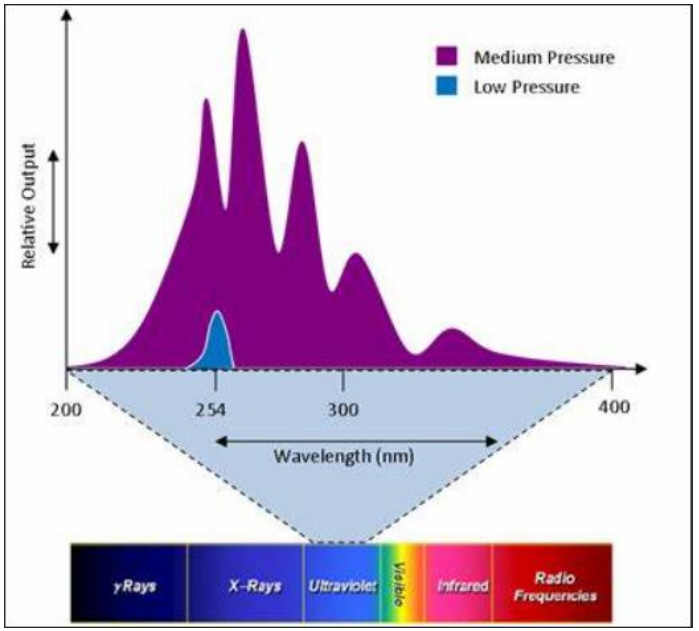
- Measuring principle: UV254nm Abortion
- The principle of measurement is based on the determination of the absorbance of organic species dissolved in water. The low range version of the probe is indicated for organic loads with a COD(KHPeq) between 0 and 370 mg/l.
- Measured parameter: UV 254nm, Abs254, COD eq, BOD eq, TOC eq

Compatible with T80 Transmitter

- Single or Dual Channel Capability
- Mix and Match the Sensors
  - UV80 alone or
  - TR82 and pH, pION, ORP, DO, Conductivity or another TR82
- Display in SAC, TOC, BOD, or COD (single Channel only). Dual channel display in SAC only
- Output in SAC, TOC, BOD, or COD

How is UV254 Measured?

- The sensor is based on the photometric determination of the UV absorbance at 254 nm. Active species, dissolved or suspended in water absorb the incident UV radiation and are detected by the sensor. The external probe is installed in a sample reservoir and measurements are taken on the circulating sample flow, guaranteeing fast analysis time.



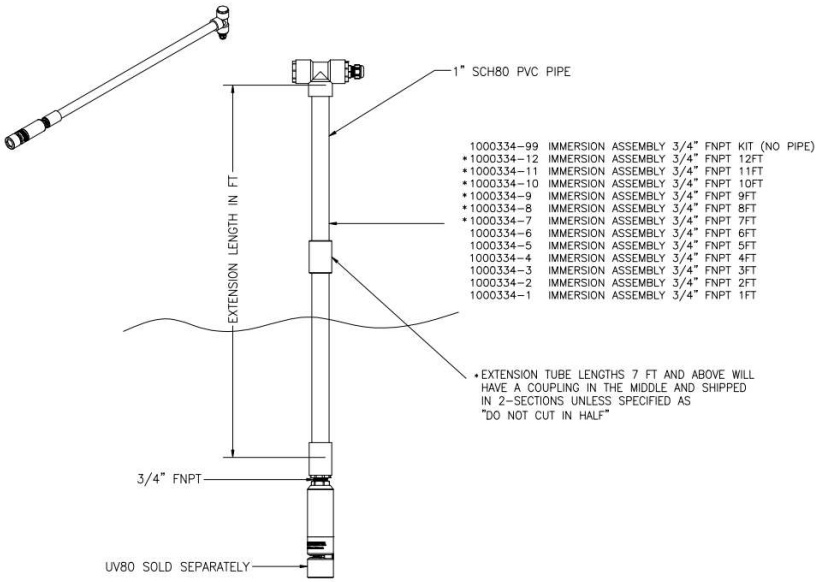
Range

- Ranges:
- Low range COD 0 - 370 mg/l eq.
- KHP / TOC 0 - 150 mg/l
- High range
- COD 0 - 1000 mg/l eq. KHP / TOC 0- 400 mg/l
- Ranges of TOC, BOD, and COD is based on a correlated factor of SAC
-

BOD / SAC	COD / SAC	TOC / SAC
0.429	1.487	0.586

Accessories and Spare Parts

- Immersion assembly,
  - PN 1000260-5
    - Standpipe, 1”OD by 5 ft length,
    - 1” compression fitting and
    - T-Handle
  - PN 1000260-99
    - Standpipe is user supplied
    - 1” slip x 1” FNPT adapter
    - 1” compression fitting and
    - T-Handle
- Flow Through Tee
  - PN 1000280-1, 2, 3
    - 2” FNPT , ¾”(Slip or NPT)
    - PVC Tee interior “Stealth Coating”
  - PN 1000305-1
    - 2” FNPT , ¾”(Slip or NPT)
    - PVC Tee interior “Stealth Coating”
    - Sprayer Cleaner
- De-Bubbler
  - PN 1000370-2
    - ¾” FNPT
    - PVC Tee interior “Stealth Coating”
- Compression Fitting
  - PN 3600066.PP
    - 1” MNPT x 1” compression



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