

WATER QUALITY MONITORING SOLUTIONS

FAQ: BYPASS SENSOR OR PROBE?

Selecting the right UVT instrument for your application.

When it comes to real-time UV transmittance (UVT) analysis, Real Tech provides two primary forms of instruments to choose from: a bypass style cabinet instrument and a submersible probe instrument.

How do you decide which is right for your application? We've developed a quick UVT product selection guide below to help.



Selecting a UVT instrument to fit your needs

With UVT instrumentation, one size does not often work for all. Thankfully, Real Tech offers various instruments and accessories to ensure we deliver a product that meets your needs. Here are a few criteria to consider when selecting an online UVT instrument:

Range Requirements

What detection range do you need?

This will narrow down the instrument measurement path length (and therefore model) needed.

Physical Location Check

Are there physical constraints for installation location, or freezing conditions for outdoor installation?

UVT probe sensors can operate in outdoor freezing weather conditions. If space constraints exist for installing probe in open channel, a bypass sensor can be selected with a pump system accessory.

Water Conditions

Is the application open channel / non-pressurized or pressurized?

This helps to determine form factor. In general, submersible UVT probes are often favored for non-pressurized applications such as in a wastewater treatment plant where the instrument can be easily installed to monitor in a tank or open channel.

Bypass UVT analyzers are more common to municipal water treatment plants or industrial process water environments where the water to be tested is pressurized. The diagrams provided in this quick guide represent common configuration examples for UV disinfection applications.

Configuration Examples:

Pressurized



UVT Analyzer (M Series)

- For real-time UVT measurement
- Utilizes a bypass stream taken from a pressurized source for measurement
- Built-in display for operation and control with 4-20mA output standard

Real Clean System

• For low maintenance automatic chemical cleaning



Open Channel /

UVT Analyzer (M Series)

- For real-time UVT measurement
- Utilizes a bypass stream pumped from an open channel or tank
- Built-in display for operation and control with 4-20mA output standard

Pump Clean System

 For low maintenance automatic chemical cleaning and pumping sample to analyzer (vertical lift up to 8ft and pumping distance up to 25ft)





UVT Probe (S Series)

• For real-time UVT measurement in-situ

Real Controller

• For affordable, user friendly operation and control with 4-20mA output standard

Air Cleaning System

• For low maintenance automatic compressed air cleaning

Mounting Kit

• For secure mounting to a tank or open channel wall, or railing



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