

In-Line UV Digester

In-line digester for UV-mediated digestion of Cyanide, Phosphorus, and Nitrogen species. rev. date 08/2023

The in-line digester is an automated unit for performing UV-mediated digestion of water samples.

In the digestion apparatus, samples are heated and then exposed to UV irradiation. Following digestion, samples are injected into the flow injection analyzer.



In-line UV Digester

FIALab offers in-line digestion chemistries for:

- **TOTAL CYANIDE** —
- **TOTAL NITROGEN** —
- **TOTAL PHOSPHORUS** —

Digestion is carried out by a UV source, with options (312 nm, 351 nm) to accommodate specifications in official methods (Standard Methods, ATSM). The digester is compact and easy to use. It has fluidic ports for directing the sample into and out of the UV-exposed chamber. The internal fluidic path is made of FEP tubing, providing a mechanically and chemically robust setup. The digester can be paired as such with the FIAlyzer FLEX analyzer. If equipped with a stand-alone peristaltic pump, the digester is also compatible with a FIAlyzer-1000 analyzer.

Specifications

Equipment	
Type	In-line Digester Module
Enclosure Material	Aluminum (powder-coated/anodized)
Wetted Materials	FEP, PEEK
Fluidic Ports	Flat-bottom ¼-28
Dead Volume	5 mL
Tubing Material	PTFE
Dimensions	
Height	4 in (10 cm)
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Depth	14 in (36 cm)
Weight	4 lb (1.8 kg)
Power Requirements	
Voltage	120 VDC, 240 VDC
Current	0.5 A

