







## **Gas Addition Module for FlowSyn**

Fast, efficient and controllable gas-liquid reactions in flow



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Rapidly generate a continuous gassaturated solvent stream

Effortlessly perform heterogeneous and homogeneous gas-liquid reactions

Enjoy the convenience of our optional Portable Gas Reservoir

Add to any existing FlowSyn or other continuous flow reactor system

The Gas Addition Module from Uniqsis provides a safe and efficient means of performing gas-liquid reactions under continuous flow-through conditions. Its primary purpose is to provide a solvent feed stream pre-saturated with gas, but it can also be used as a reactor in its own right.

Fast, controllable gas saturation: The ingenious 'tube-in-tube' design promotes rapid diffusion of pressurised gas through gas-permeable tubing to quickly generate a continuous gas saturated solvent stream in typically less than 10 seconds (for  $H_2$ ). No undissolved gas bubbles to disrupt control of pressure and residence time!

Wide variety of applications at your fingertips: Compatible with a wide range of reactive gases (e.g. CO, CO<sub>2</sub>, H<sub>2</sub>, D<sub>2</sub>, ethene, ethyne, SO<sub>2</sub>) and organic solvents (e.g. THF, MeCN, MeOH, PrOH). Effortlessly perform heterogeneous and homogeneous gas -liquid reactions such as hydrogenation, ozonolysis, carbonylation, and direct synthesis of carboxylic acids.

Flexible: Connect in-line with any FlowSyn or other continuous flow reactor system.

Safe: Integral safety features (protective glass cover and gas pressure release valve) and the use of small gas volumes ensure safe operation in the lab. In addition, the convenient optional Portable Gas Reservoir (UQ1098) avoids the need to bring bulky pressurised gas cylinders into the lab.

UQ-1099/UQ1099S Gas Addition Module — Specification	
Reactor tubing (1 m)	Outer: FEP (UQ1099) or optional 316 stainless steel (UQ1099S) Inner: Teflon AF-2400
Gas/liquid volume	1.2 ml gas /0.5 ml liquid
Flow rate	0.1 to 10 ml/min
Maximum gas pressure	27 bar
Time to 100% saturation	5 to 10 s
Dimensions	330 mm (l) x 190 mm (w) x 150 mm (h)
Weight	2 kg unpacked











