

# Ideal for chemists who are interested in the utmost functionality and access to the widest range of chemical space.

The Asia Premium Systems offer a full range of Asia modules and enable standard flow chemistry operations (reaction optimization, scale-up, etc.) as well as advanced use (electrochemistry, multi-step reactions, cryogenic reactions, etc.). These exhaustive systems include the benefits of all the other systems.

	Regular	Advanced
Flow rate	1.0µL/min to 10mL/min*	
Pressure (bar)	0 to 20bar**	
System temp. (°C)	-100 to +250	
Pump channels	4	6
Chip reactors	✓	✓
Tube reactors	<b>✓</b>	✓
Column reactors	<b>✓</b>	<b>✓</b>
Electrochemistry	<b>✓</b>	<b>✓</b>
FLUX volume	N/A	N/A
Product collection	AUTO	AUTO
Aqueous work-up	<b>✓</b>	✓
Pressurized inputs	<b>✓</b>	✓
Injection valves	4	4
Auto injection valves	×	2
Analysis interface	/	<b>✓</b>
Automation	/	<b>✓</b>

Depending on the syringe size.

10 bar when using fluoropolymer tube reactors.

Depending on cooling solution.

# **Modules**

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#### **Pressurized Input Store**

Pressurizes four bottles with an inert gas enabling the use of air sensitive reagents and eliminates cavitation when pumping. Input pressure 1-10 bar, output pressure 1 bar.

# **Heater and Chip**

This module has adaptors that can be changed in seconds to heat the full asia range of reactors. Temperature range from room temperature to 250°C.

#### **FLLEX**

The Flow Liquid Liquid EXtraction (FLLEX) offers continuous flow aqueous work up. Internal volume 100µl. FLLEX can be used anywhere within the flow setup.

## **Pressure Controller**

Automatically pressurizes the reaction up to 20bar (300psi) for ultra-fast reaction rates and control of gas/liquid reactions.

#### **Automated Collector**

Allows automated collection of multiple reactions in separate vials or vessels. Waste is automatically diverted.

## **Auto RIM**

Includes two independent chemically resistant channels allowing reagents stored in racks of septum capped vials to be automatically aspirated and loaded into injection loops.

#### Reagent Injector

2 extremely chemically resistant injection valves with sample loops. 0.1ml, 1ml, 5ml or 10ml, manual or automated control, 0 to 20 bar. Ideal for rapid reaction optimisation.

# **Asia Manager Software**

Easy to use for total 'walk-away' control of the Asia System.

#### Syringe Pump

Extremely chemically resistant continuous flow pumps for ultra smooth flow. Flow rate from 1µl/min to 10ml/min each, 20 bar, pressure sensor.

#### Cryo Controller

Rapidly cool a selection of fluoropolymer or stainless steel tube reactors to -70°C or a range of glass or quartz microreactors to -100°C. Requires only mains power, no need for cryogenic media.

# Sampler and Dilutor

Enables on-line reaction analysis by automated sample extraction, dilution and transfer to an analytical system e.g. LCMS or UPLC. Dilution factor: 5 to 250.

#### FLUX - Flow Electrochemistry

Enables a wide range of electrode materials to be changed in seconds. No tools. Includes a power supply and electrochemical flow cell with minimal electrode gap. Internal reaction volume 225µl.

## **Chip Climate Controller**

Enables glass microreactors to be cooled or heated from -15°C to +150°C - no need for circulator or cold water supply.