

HIDispenser

The smart liquid dispenser



□ The HIDispenser – General features

The HIDispenser is a positive displacement bulk reagent dispenser for reliable non-contact liquid handling.

It provides automated processing of microplates, reservoirs, microtubes for biological, chemical or medical laboratories.

It is designed as a standalone dispensing system to managed automated dispensing of a complete plating SBS size racks of 1 to 8 positions (M size).

The basis of the HIDispenser is a combination of syringe dispensing system with a large range of dilutors choice.

It could be also dispensed with a peristaltic pump from 1 to 24 independent channels.

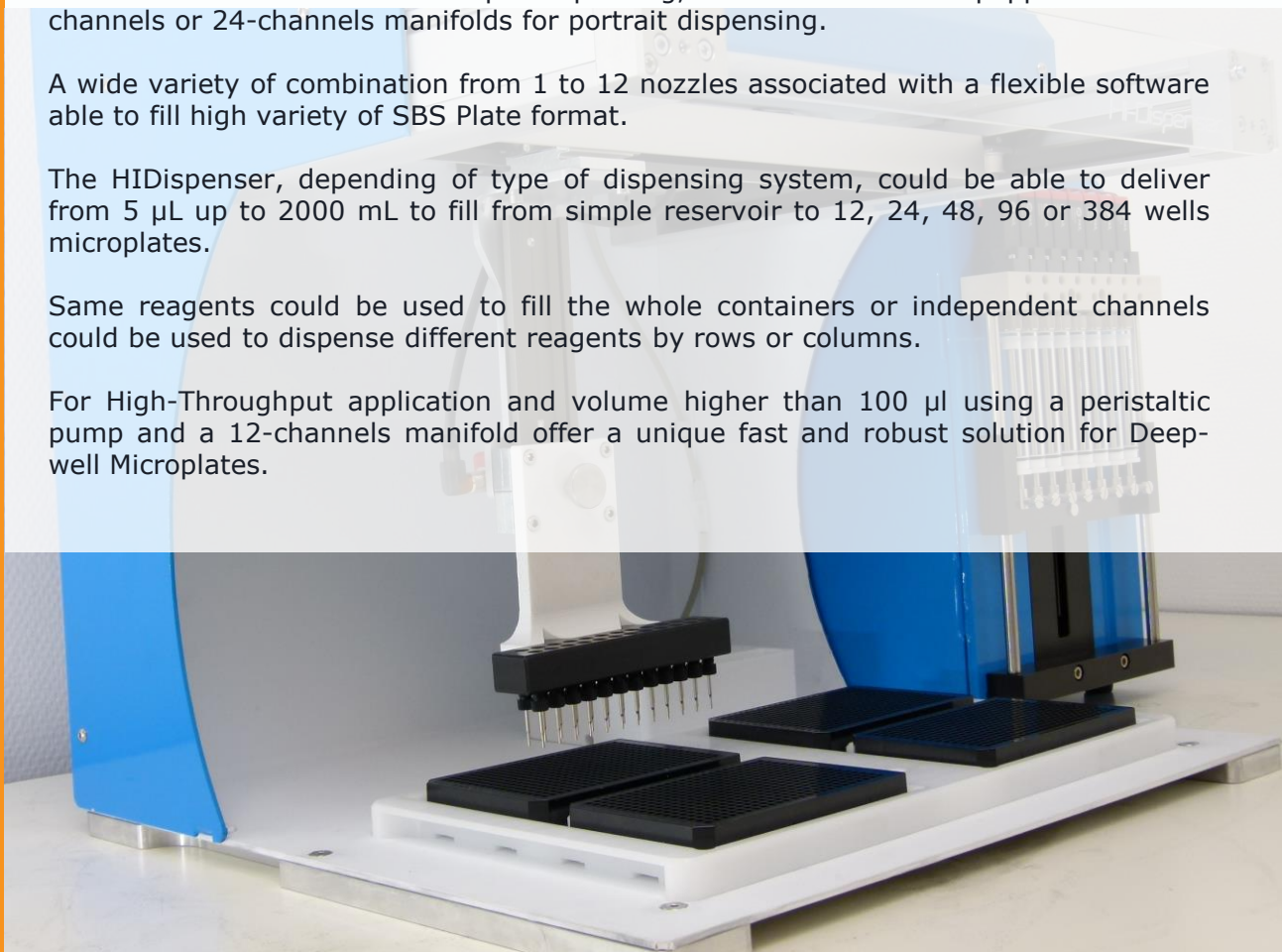
To fill SBS plate format, the HIDispenser can be equipped with 8-channels or 16 channels manifolds for landscape dispensing, it could also be equipped with 12-channels or 24-channels manifolds for portrait dispensing.

A wide variety of combination from 1 to 12 nozzles associated with a flexible software able to fill high variety of SBS Plate format.

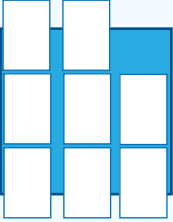
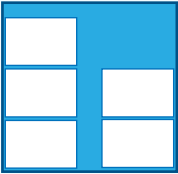
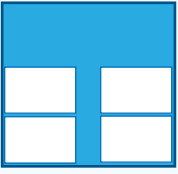
The HIDispenser, depending of type of dispensing system, could be able to deliver from 5 μ L up to 2000 mL to fill from simple reservoir to 12, 24, 48, 96 or 384 wells microplates.

Same reagents could be used to fill the whole containers or independent channels could be used to dispense different reagents by rows or columns.

For High-Throughput application and volume higher than 100 μ l using a peristaltic pump and a 12-channels manifold offer a unique fast and robust solution for Deep-well Microplates.



□ The HIDispenser – Example containers configuration

		Channels	Filling	options
8 SBS Microplates or microtubes racks		Comb 12	Lines	<ul style="list-style-type: none"> • Volume detection
5 SBS Microplates or microtubes racks		Comb 1 Comb 4 Comb 6 Comb 8 Comb12	Lines or columns	<ul style="list-style-type: none"> • Barcode reader • Volume detection
4 SBS Microplates Or microtubes racks		Comb 1 Comb 4 Comb 6 Comb 8 Comb12	Lines or columns	<ul style="list-style-type: none"> • Barcode reader • Volume detection

❑ The HIDispenser – Custom containers configuration

Thanks to the highly flexible software solution, it is possible to select in the range of X/Y heads displacement any types of containers and to design a destination frame which will accommodate any of your containers.

❑ The HIDispenser – Dispensing configuration

We offer 2 choices of dispensing technologies

❖ Peristaltic pump

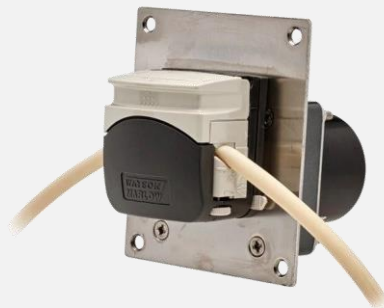
They are positive displacement pump used for pumping difficult liquids. They are ideal for production applications where high volume / high speed dispensing is required.

It is also possible to dispense cells or biological materials and changing the tubing if necessary is really fast.

A large variety of tubes material are available.

Different choices of inner diameter brings better reproducibility depending of required volume range.

Single peristaltic pump



Multichannels peristaltic pump

1 to 12 channels



❖ Syringe pump

They are highly flexible fluid dispensing pump with great accuracy and precision. Their compact design able using up to 3 different pumping system on the same HIDispenser.

Different choices of pump from single syringe pump up to 8 syringes pump. A large variety of syringe size to fit the perfect precision with the highest speed.

Single syringe pump



Syringes type :

- 0,5 mL**
- 1 mL**
- 2 mL**
- 5 mL**
- 10 mL**
- 50 mL**

Multi syringes pump

4, 6 or 8 syringes



Syringes type :

- 0,5 mL**
- 1 mL**
- 2 mL**
- 5 mL**

❑ The HIDispenser – Software

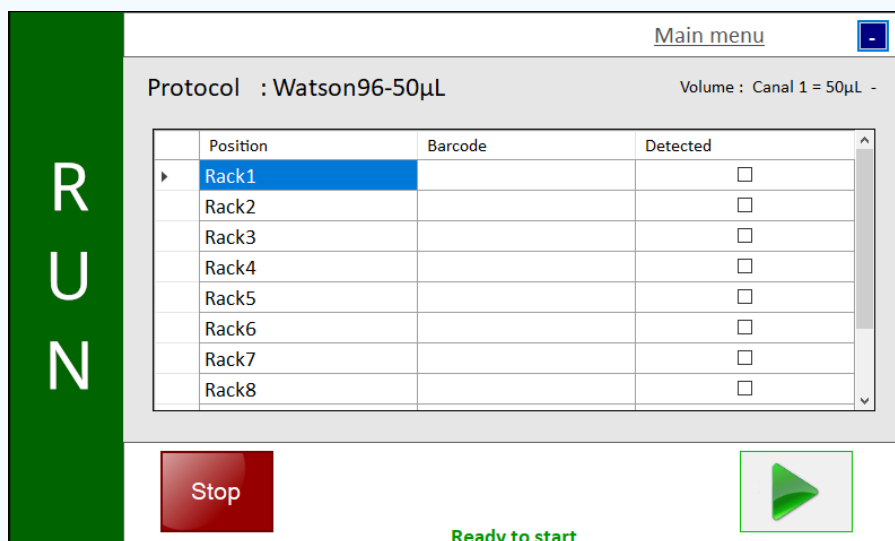
The Graphical User Interface (GUI) with touch screen makes the system easy to configure and operate even with laboratory gloves.

The protocol manager help you easily built your protocols defining the type of containers, the dispensing profiles and create filters to easy sort them !



Select the protocol to be run.

You will see your boxes positions and simply press start arrow to start detecting plate presence and dispensing.



■ The HIDispenser – Specifications

	Base frame	Base frame + Dilutor dispensing System up to 8 channels	Base frame + Peristaltic Pump Dispensing System up channels
Width (cm)	43,7	61,7	61,7
Depth (cm)	44,8	44,8	46,5
Height (cm)	58,7	58,7	58,7
Weight (kgs)	19,1	25,2	29,6
Dispensing specifications			
Minimum recommended dispensing volume		5 µL (depending) syringe volume	50 µL (depending pump and tubing)
Performance Example		20µL <3% CV% with water (5ml Syringe)	100µL <5% CV% with water (Tubing 1,02 mm)
Regulatory compliance			
CE Certificate	CE Certified		
Control			
Software	HIDispenser Control, Protocol Manager		
Controller	Panel PC with Windows 10 Embedded		
Interface	10 Base T Ethernet port		
External control	API for external control via RJ45 Ethernet Port		
Deck Capacity			
Waste position	1 waste for 8/16 or 12/24 Nozzles (portrait or landscape)		
Dispensing position	Standard 4 SBS Positions. Highly configurable see example containers configuration		
Containers compatibility			
>100	From SBS reservoir, to SBS microplates, microtubes in SBS rack.		

Your solutions



Real Swiss Army Knife

Whatever the type of containers, the volume you have to dispense and the speed you are looking for. We will do our best to provide you with a standalone or fully automated filling solution.

CyRISBio

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