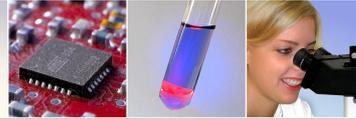


AVISO®

Your Innovator for Lab Automation



RoboAmp® 4200

Automation of all sequencing and PCR applications

In industry and research with the only robot available worldwide that enables fully automated contamination free reactions in a micro plate. In the modern laboratory, automated processes are now required to achieve higher throughput and more reliable results. The complete automation of every pipetting and PCR step makes the robot with integrated Primus HTR thermal cycler the ideal solution for high sample throughput and maximum reproducibility with optimum results, sample management using barcodes, and user-friendly Windows interfaces.



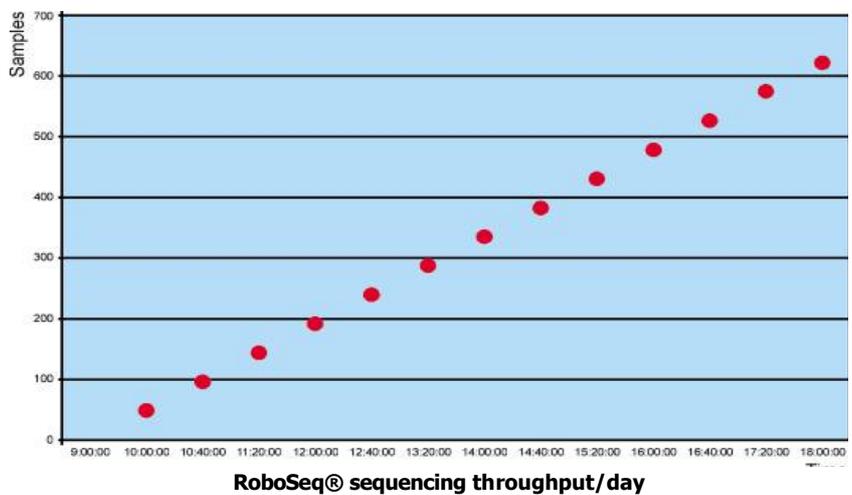
AVISO®

Service and Support

AVISO GmbH – your partner in automation will not abandon you after your purchase: product specialists are happy to help you to optimize your application. Our service engineers are there for prompt comprehensive help.

Automated gel loading station.

Upon completion of PCR RoboSeq® & RoboAmp® 4200 can load onto an agarose gel in a 96 well format. With the help of a special adaptor the gel loading station is secured onto one of the pipetting positions. With the aid of a precision loading device the pipette needle is guided accurately into the agarose gel wells for loading.



Order information:

8500-002201 RoboAmp® 4201 P
Robot for the automation of Non Cross Contamination (NCC) PCR

8500-002202 RoboAmp® 4201 PE
Robot for the automation of Non Cross Contamination (NCC) PCR with extended arm

8500-002205 RoboAmp® 4201 PBE
Robot for the automation of Non Cross Contamination (NCC) PCR with extended platform

The lid technology of the NCC-PCR-System is covered by pending patent protection rights (DE44 122 86 and EP 0 734 769) of the firm Boehringer Mannheim GmbH. The use of this technology in the NCC-PCR-System is placed according to license agreements between the firms Boehringer Mannheim GmbH and Innova GmbH, and between MWG-Biotech GmbH and Innova GmbH and is only to be implemented for non deductable basic research etc. in the fields of medical analysis, PCR-uses, microbiology and pathology.

*PCR is covered by patents owned by Hoffmann-La Roche, Inc. and F. Hoffmann-La Roche Ltd. Users should obtain license to perform the reaction.



Non Cross Contamination (NCC) PCR*

Exclusively with the patented Non Cross Contamination (NCC) consumable and the RoboAmp^{®4200} Robot. To prevent cross contamination every vessel on the work surface of the robot is closed with totally airtight individual seals.

Opening and closing of the special NCC-consumables takes place automatically with a newly developed sealing mechanism.



Automated opening and closing of the NCC consumables

Higher sample throughput

for higher productivity in the laboratory RoboSeq[®] & RoboAmp^{® 4200} can run as completely integrated systems around the clock. Load your samples and reactions, select a protocol and start a run.

After just 5 minutes preparation time 600 sequence reactions (only 8 hours!) or up to 12 PCR plates can be processed without any intervention for action by the user. The perfect combination of individual system components makes the robot one of the most up-to-date and innovative instruments for molecular biology applications.

Precision liquid handling optimized for PCR* and Sequencing.

RoboAmp[®] & RoboSeq^{® 4200} have a precision dosage system for the most accurate pipetting (liquid handling) of the smallest volumes. A choice of washable ceramic-coated metal needles for pipetting sequencing reactions or conductive disposable (filter-) tips for contamination free PCR is available. Liquid level detection to prevent pipetting errors and for minimal tip contact with liquid is a prerequisite for contamination free studies.

Plate Handler.

Moves the micro plates from the pipetting position into the thermal cycler or onto the stacker. The plate handler allows the complete automation of complex protocols and the pipetting of several plates without the need for further intervention by the user (Walk away operation).

Peltier cooled reagent and pipetting positions.

Peltier cooled reagent racks (4°C) for the careful storage of reactions and enzymes on the work surface of the robot. Cooled pipetting positions for reproducible addition of the reagents independent of the external temperature.



Ready protocols for better results.

Ready-to-use with optimal protocols for PCR and sequencing (cycle sequencing) Start up a protocol and leave the rest to the robot. Automation of virtually all applications in molecular biology such as fragment analysis, insert amplification, primer extension, enzyme digestion, incubation etc.



Sample Management with Bar Code Reader and Printer



Integrated Primus HTR
High speed thermal cycler

High speed PCR* through innovative HTR technology

RoboAmp® & RoboSeq® 4200 are equipped with the Primus thermal cyclers with 250°C HTR (High Temperature Range) Peltier technology. The loading of the cycler takes place with the plate handler; the motorized lid opens and closes automatically. In parallel processing, for the highest throughput, a second plate is already prepared while the first plate is being cycled.

Integrated sample management with barcode.

Barcode printer and reader facilitate accurate sample management without the high throughput risk of sample mix up. A GLP-report records every single stage in the process: pipetting, moving of plates, PCR. Reliable results day after day. The results can be transferred to the LiCor sequencer in a software handshake.

Intuitive Windows software for rapid and simple operation

A specially developed assistant (RoboSeq® Wizard) guides the user through the RoboSeq® software (Windows 95 or Windows NT). Flexible and user-friendly, standard protocols and PCR programs can be modified and adapted to particular requirements. New complex applications can be set up simply through the click of a mouse using standard applications linked together.