

CHRONECT XPR

Robotic Powder Dispensing



Boost Efficiency

Thanks to the 6-axis robotic arm, highly accurate multi-component formulations and calibration standards can be prepared fully automatically, freeing up time to work on other tasks.



Maximize Sample Yield

The XPR automated dispensing technology enables samples as small as 1 mg to be dispensed with the highest precision. Automated dispensing minimizes spillage and maximizes the yield of your valuable samples.



Dispense with Flexibility

CHRONECT XPR can accommodate 3 different vial plates, each holding from 12 up to 96 vials of 1–8 mL volume. With space for up to 32 different powders you have the ultimate flexibility for formulations.



Maintain Full Control

CHRONOS software enables you to schedule multiple multi-component formulations. The dispensing process can be monitored directly in CHRONOS. Results can be analyzed and exported if desired.



Fully Automated Preparation Of Multi-Component Formulations

In a fully automatic process, the CHRONECT XPR Robotic Powder Dispensing platform enables you to prepare up to 288 samples/formulations, each consisting of up to 32 powders.

This unique system combines the advanced weighing and dispensing technology of the XPR Automatic Balance with a state-of-the-art 6-axis robotic arm and the easy-to-use CHRONOS software. It offers unprecedented accuracy, repeatability, efficiency, and flexibility. CHRONECT XPR dispenses from 1 mg up to several grams of fine, flaky, statically charged, compacted, granular or heterogeneous powder substances.

Thanks to the compact footprint, the platform can be set-up on any lab bench as well as in cabinets and glove boxes.

Fully Automated Preparation of Powder Formulations and Solutions

The CHRONECT XPR Robotic Powder Dispensing platform consists of the following main components:

- UR3e 6-axis robot arm with gripper
- XPR226DRQ Automatic Balance
- Vial plate holder for up to 3 plates
- Powder dosing head rack with 32 positions
- PC with CHRONOS Software

Optionally, the platform can be expanded with various types of PAL robotic systems, offering additional storage and capping, vortexing and barcode reader capabilities, all under the control of the CHRONOS software.

Collaboration Partner Trajan Scientific and Medical

Due to their expertise in this laboratory automation segment, METTLER TOLEDO collaborates with Trajan Scientific and Medical. A partner with 30 years of experience in laboratory automation, including the acquisition of LEAP Technologies Inc., Trajan is a professional partner that offers, distributes and services the CHRONECT XPR solution in the United States and Canada. For more information: www.trajanscimed.com



Technical Data

Dispensing	Dispensing range	1 mg – several grams
	Dosing heads	Up to 32 powder dosing heads
	Suitable chemicals	Free-flowing, fluffy, granular, statically charged powders
Sample and Weighing	Target vessel	1 mL to 8 mL vials in up to three SBS plates
	Dispensing time per component	10–60 seconds, depending on substance
	Compatible balance models	XPR226DRQ, other Automatic Balance models on request
	Readability (full range/fine range)	0.01 / 0.005 mg
	Minimum weight automated (tolerance = 1%)	0.7 mg
	Minimum weight automated (USP, tolerance = 0.10%)	7 mg
Robot Arm	Model	Universal Robot UR3e
	Robot type	Collaborative
	Robot specifications	6-axis / 3 kg payload
	Handling tools	Gripper for handling vials, dosing heads and adapters
Operating System	Operating and control	PC with Windows 10
	Task and formulation settings	CHRONOS Software
	Data and report management	CHRONOS Software
Options	Additional capabilities	On request – PAL Robotic Handler
	Further options or modifications	On request
Platform	Dimensions, W×D×H (mm)	950 × 700 × 800
	Weight	ca. 95 kg