# Automated D

Powder and Liquid Dosing for Perfect Concentrations





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# Quantos –

# Automated Weighing & Dosing

Weighing powders and preparing solutions are the most common tasks for an analytical balance. Dosing powder by hand takes a long time, represents a potential source of errors and is potentially dangerous when toxic substances are involved. Preparing solutions using volumetric flasks is cumbersome and one risks errors and cross contamination.

Quantos combines powder and liquid dispensing technology with METTLER TOLEDO high-end balances for fast, safe and economical powder weighing and solution preparation.

## Speed



Automatic dosing up to 20 times faster than the manual process. Quantos doses 1 mg to 5 g within 15 to 90 seconds!

### Safety



Quantos protects you and your samples – hazardous substances remain sealed and aerosol formation is kept to an absolute minimum.

#### Saving



Quantos reduces the minimum weight by 40 %. Liquid dosing is independent of volumetric glassware. Altogether savings of up to 90% are possible.

www.mt.com/quantos



#### **Order Information**

Description	Remarks	Article Number
Quantos balances		
QD206DR	Weighing unit	11141007
QD206DR/A	Weighing unit, approved	11141010
QD206DR/M	Weighing unit, approved (US)	11141009
Autosampler		
Autosampler QS30	Including 6 cassettes for $\varnothing$ 24 mm bottles or adapters	11141300
Cassette for 5 bottles (max Ø 24 mm)	Set with 6 cassettes, numbered 1 to 30	11141772
Cassette for 5 bottles (max Ø 28 mm)	Set with 6 cassettes, numbered 1 to 30	11141773
NetCom-Kit	Those 2 elements must be ordered in order to	11141832
Ethernet	make the service of the upgraded balance possible	11132515
EQPac Quantos	Mandatory	11141040
Ionizing Kit	Optional	11141829
Cable Box	Optional	11141845

## QB5 + optional QS30

Thanks to the QS30 auto sampling system, you can process up to 30 samples per batch. The automation helps you to save time and to focus on other tasks.

- The spacesaving, ring-shaped design is optimised for the tightest of laboratory spaces.
- With a wide range of accessories including vial adapters for a variety of different vessels, almost all common powder dosing applications can be executed.

## **Automation**

# with the Footprint of a Balance

Whether you use a classical volumetric flask or the game-changing Quantos – gravimetric sample preparation – technology, METTLER TOLEDO has the right solution for you. The modular concept allows to upgrade an XP analytical balance to an automatic weighing system that is also able to prepare perfect concentrations.

Significant economical and ecological benefits can be realised: a reduced amount of substance and solvent consumed, less waste and a reduced risk of exposure for the user.

#### **QB** Series



#### **Powder Dosing**

Automate the powder dosing process and reduce the minimum weight of your XP balance.

- Speed up your powder dosing process by up to a factor of 20
- The user is protected from toxic substances: the powder is contained in the dosing head only releasing the required amount
- Save typically 40% of your substance: automation reduces the typical minimum weight of an XP205 from 24 mg to 15 mg according to USP.

#### **QA** Series



#### Liquid Dosing

To prepare a solution the amount of substances is measured and the exact quantity of solvent is added to achieve the desired concentration.

- No need to weigh in your substance accurately: over- or undershoots are compensated by adding the right amount of liquid.
- No need for volumetric alassware
- Automation and documentation reduce the risk of errors.

#### **QB** Series



#### Powder and Liquid Dosing

To prepare a solution an amount as low as 15 mg is weighed according to USP and the exact amount of solvent is added to achieve the desired concentration.

- From now on the amount of substance is no longer determinated by volumetric flasks but by the minimum weight of the balance resulting in significant savings.
- No need for volumetric glassware
- Automation and documentation reduce the risk of errors.



#### **Quantos QSE2**

## Safety Enclosure

The QSE2 safety enclosure is the latest generation of containment systems specifically designed to protect the analyst during the weighing and dosing process. It has been performance tested specifically for the weighing of active drug compounds. In addition to proven safety performance, the unique design and control features of the QSE2 makes this system the most flexible and user friendly in the industry.

#### Order Information Instruments

Description	Remarks	Article Number
Powder and Liquid dosing units		
Q2	Powder Dosing Unit	30005906
QL2	Dosing Unit Pump module and all necessary cables for connection to a QB5	30008317
QLL1000	1000 ml pressure tight bottle (DIN GL45 thread) with liquid dosing head	30008318
NetCom-Kit	Those 2 elements must be ordered in order to make	11141832
Ethernet Option	the service of the upgraded balance possible	11132515
EQPac	Quantos Mandatory	11141040
lonizing Kit	Optional	11141829
Cable Box	Optional	11141845
Safety Enclosure		
QSE2 Safety Enclosure	Compact enclosure for working in safe manner	30015312
EQ-Pac Safety Enclosure	Qualification Package	11141253
Label Printer Adapter (panel and inlet)	for CLP-631 label printer	11141294

# **Quantos Dosing Heads**

A Safe Container for Substance

The intelligent dosing head has been developed to dose free flowing powdery substances such as APIs or reference standards where purity and quality of substance is essential and of highest importance. The use of a closed system avoids cross-contamination and protects the user, the substance and the environment. Simple dosing head portfolio: you've got the application — we've got the head.



#### Robust – Precise – Accurate



A highly precise mechanism, with an integrated stirrer guarantees a homogeneous flow of the powder. Four motors drive the powder flow with real time feedback from the balance, no settings to play with. Testing of thousands of different powders gave us the experience needed to best serve your powder dispensing needs.

Intelligent Dosing Head



The integrated RFID chip learns powder characteristics, optimizes the dosing accuracy and speed. All information (substance ID, quantity, date etc.) is saved and can be printed or called up at the touch of a button for 100 % traceability ensured. No training required. Simply place the head on your Quantos device and start working.

Enhanced safety



The dosing head is attached to the container for the lifetime of your substance. A single dosing head for each powder eliminates cross contamination risk. Thanks to the impact resistant and sealed transport container, each head and thus your valuable substance is completely protected. The transport container prevents moisture from being absorbed and is very low temperature compatible.

# Order Information Accessories



Description	Remarks	Article Number
Dosing Heads		
QH008-BNM bulk	8 ml substance volume	11141533
QH012-LNM bulk (set of 10)	12 ml substance volume	11141532
QH016-BNM (set of 3)	16 ml substance volume, with transport box	11141503
QH120-LNM (set of 3)	120 ml substance volume, with transport box	11141502
QH012-LNL bulk (set of 10)	12 ml substance volume, optimised for several grams target weight.	11150145
QH120-LNL (set of 3)	120 ml substance volume, with transport box, optimised for several grams target weight.	11150144



#### Technology

FDA compliant dosing heads are made out of TPX polymer and 316L/1.4404 stainless steel. This material combination features excellent electrical chemical and physical properties, focusing on professional laboratory environment and best weighing practices. For non regulated environments POM material heads are available. Sterilized heads are available on request.



#### **Label Printer**

Citizen Label Printer Kit	Matrix barcode can be printed	11141820
Set with labels and ribbon	2 label rolls, 1 ribbon roll	30004309



#### **Protocol Printer**

Protocol Printer Kit	for print-outs on (adhesive) paper with RS232 connecting cable	11141834
Ribbon Cartridge black, for RS-P25	1 cartridge	12120798
Standard Paper, for RS-P25	5 rolls	12120799
Self Adhesive Paper, for RS-P25	3 rolls	11600388



#### **LabX** direct

LabX direct QuantosConnect	bidirectional data transfer, sequence programming	30008323
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#### **Vial Adapter**

Set ErgoClip Quantos	with 5 different adapters	11141570
(Support and adapters)	$\varnothing$ 10.3 – 21 mm (1 pc. each)	
Vial adapter POM Ø 10.3 mm <sup>3)</sup>	for use with ErgoClip/Sampler, (5 pcs.)	11141571
Vial adapter POM Ø 12.0 mm <sup>3)</sup>	for use with ErgoClip/Sampler, (5 pcs.)	11141575
Vial adapter POM Ø 15.0 mm <sup>3)</sup>	for use with ErgoClip/Sampler, (5 pcs.)	11141572
Vial adapter POM Ø 16.2 mm³)	for use with ErgoClip/Sampler, (5 pcs.)	11141573
Vial adapter POM Ø 21.0 mm³)	for use with ErgoClip/Sampler, (5 pcs.)	11141574
Vial adapter stainless steel for size 0 capsules	for use with ErgoClip/Sampler, (5 pcs.)	11141398
Vial adapter stainless steel for size 00 capsules	for use with ErgoClip/Sampler, (5 pcs.)	11141799
Vial adapter stainless steel for size 000 capsules	for use with ErgoClip/Sampler, (5 pcs.)	30006416
Vial adapter stainless steel for size 3 capsules	for use with ErgoClip/Sampler, (5 pcs.)	30006431
Customized adapters are available on request, e.g. ErgoPocket	for use with ErgoClip for 64 x 100 mm stability pockets	



<sup>3)</sup> POM ELS (electrically conducting)





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ErgoDisc	for 12 capsules, size 0	11141751
ErgoDisc	for 12 capsules, size 00	11141754
ErgoDisc	for 12 capsules, size 000	11141753
ErgoDisc	for 12 capsules, size 1	11141755
ErgoDisc	for 12 capsules, size 3	11141752
Support of ErgoDisc	required to use the ErgoDisc	11141750
Access Door	for ErgoDisc	11141760