

# cobas<sup>®</sup> 5800 System\*

## System Specifications



\*In development

### Performance specifications

	<b>cobas<sup>®</sup> 5800 System</b>
<b>Time to first results (up to 24 tests)*</b>	2 hours 45 minutes
<b>Subsequent batches (24 tests)</b>	Every 60 minutes thereafter
<b>Maximum throughput (8 hrs   24 hrs)*</b>	144   528 tests
<b>Walkaway time*</b>	up to 8 hours
<b>Maximum number of tests per run</b>	24 tests including controls
<b>Results released</b>	Runs of 24 tests, with up to 6 assays per run
<b>User interactions</b>	<ol style="list-style-type: none"> <li>1. Load/unload samples, load reagents and consumables as needed</li> <li>2. Remove waste (solid and liquid)</li> <li>3. Review and auto-release results</li> </ol>
<b>cobas omni Utility Channel</b>	<ul style="list-style-type: none"> <li>▪ Consolidate open channel assays** with Roche IVD assays on a single platform</li> <li>▪ Develop and automate your own LDTs with up to 24 targets per plate</li> <li>▪ Mixed processing of open channel assays and Roche IVD assays</li> </ul>

\* Walkaway time is dependent on number of tests performed and number of runs initiated (under continuous testing conditions >96 tests per shift, walkaway time may be between 4 – 8 hours)

\*\* Open channel assays may include third-party IVD assays, as well as routine lab-developed tests (LDTs).

### Onboard inventory

	<b>cobas<sup>®</sup> 5800 System</b>
<b>Samples (Standard tubes   RD-5/MPA Racks   Collection medium containers)</b>	128   80   28
<b>Assay reagent cassettes</b>	Up to 15 (up to 7,200 tests)
<b>Control mini racks</b>	Up to 16
<b>cobas omni MGP reagent</b>	1 (480 tests)
<b>cobas omni specimen diluent reagent (1 L bottle)*</b>	1 (240 tests)
<b>cobas omni lysis reagent (1 L bottle)</b>	2 (432 tests)
<b>cobas omni wash reagent (4 L bottle)†</b>	1 (240 tests)
<b>cobas omni processing plates 24</b>	4 (96 tests)
<b>cobas omni liquid waste plates 24</b>	4 (96 tests)
<b>cobas omni processing plates 24</b>	8 (192 tests)
<b>Processing tips‡</b>	3 x 96 (144 tests)
<b>Eluate tips</b>	2 x 96 (192 tests)

\* Calculated for the addition of 350ul

† For 3-4 assays per run

‡ 2 processing tips are needed per sample



Not available in all markets, including the U.S.

## Compatible tubes

Tube dimensions acceptable for use on the **cobas**<sup>®</sup> 5800 System

Tube size	Acceptable measurement (mm)
Height (without cap)	65-103
Outside diameter (includes barcode label)	12.0 - 16.2

## Barcode types supported

### 1D barcodes

- Code 128
- Code 39
- Codabar
- Interleaved 2 of 5
- EAN-8
- EAN-13
- Code 93

### 2D barcodes

- Data matrix ECC 200
- Aztec code

## Power supply

Line voltage	100-240 VAC +/- 10%
Line frequency	50/60Hz +/- 10%
Maximum power consumption	1600 VA

## Environmental requirements (Operating)

Ambient room temperature	15°C to 32°C
Relative humidity	20% to 80% (no condensation)
Altitude	up to 2000 m
Pollution degree	2

## Dimensions & weight

### cobas<sup>®</sup> 5800 System

Instrument dimensions	134 x 175 x 79 cm (W x H x D)
Instrument weight	623 kg

## X800 Data Manager

- Functions as a central server when interconnecting and operating multiple Systems
- System connectivity: up to 3 analytic systems managed by a single x800 Data Manager
- LIS Connectivity: uni- and bi-directional communication using HL7 standard protocol

## Contamination prevention

- Airlock doors
- Pipette tips with filter technology
- Dedicated pipette tips for each sample transfer and for transfer of extracted nucleic acid
- Stainless steel 2-fold needle pipetting transfers assay-specific reagents, controls (RMCs) are transferred with pipette tips and other bulk reagents required for sample preparation and amplification; washed after each use
- Automatic heat sealing of **cobas omni** Amplification Plate

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