



## cobas<sup>®</sup> 5800 System

### System specifications

Performance specifications	cobas <sup>®</sup> 5800 System
<b>Time to first results (up to 24 tests)* Subsequent batches (24 tests)</b>	2 hours 45 minutes Every 60 minutes thereafter
<b>Maximum throughput (8 hrs   24 hrs)*</b>	144   528 tests
<b>Walkaway time</b>	up to 4 hours
<b>Maximum number of tests per run</b>	24 tests including controls; with up to 6 different 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>

\*May vary based on workflow demands.

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

Onboard inventory	cobas <sup>®</sup> 5800 System
<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 amplification 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

[More info on diagnostics.roche.com](https://www.roche.com/diagnostics)

### Compatible tubes

Tube dimensions acceptable for use on the **cobas® 5800 System**

#### Tube size

Acceptable measurement (mm)

#### Height (without cap)

65 - 103

#### Outside diameter (includes barcode label)

12 - 16.2

#### 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

### Power supply

#### 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

- Controlled air flow in the deck area
- Pipette tips with filter technology
- Dedicated pipette tips for each sample transfer and for transfer of extracted nucleic acid
- Stainless steel 2-fold needle transfers assay-specific reagents and other bulk reagents required for sample preparation and amplification; washed after each use
- Controls (RMCs) are transferred using pipette tips
- Automatic heat sealing of **cobas omni** Amplification Plate

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