

# **cobas<sup>®</sup> 5800 System**

*Specification sheet*



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## PERFORMANCE SPECIFICATIONS

<b>Time to first results (up to 24 tests)*</b> <b>Subsequent runs (24 tests)</b>	<ul style="list-style-type: none"><li>• 2 hours 30 minutes</li><li>• Every 60 minutes thereafter</li></ul>
<b>Maximum throughput (8 hrs   24 hrs)*</b>	144   528 tests
<b>Walk-away time*</b>	8 hours
<b>Test Format</b>	<ul style="list-style-type: none"><li>• Plates of up to 24 tests with up to 6 assays per plate</li><li>• Two 24 well thermal cyclers</li></ul>
<b>User interactions</b>	<ul style="list-style-type: none"><li>• Load/unload samples, load reagents and consumables as needed</li><li>• Remove waste (solid and liquid)</li><li>• Review or auto-release results</li></ul>
<b>Support for lab developed tests with the cobas omni utility channel</b>	<ul style="list-style-type: none"><li>• Develop and automate your own lab developed tests (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 assays, as well as routine lab-developed tests (LDTs).

## ONBOARD INVENTORY

<b>Sample Capacity</b>	<ul style="list-style-type: none"><li>• Up to 128 primary or secondary specimen tubes</li><li>• Up to 28 liquid based cytology vials (ThinPrep<sup>®</sup> PreservCyt Solution)</li><li>• Up to 80 samples loaded in 5-position racks</li></ul>
<b>Reagent capacity</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)<sup>†</sup></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<sup>‡</sup></b>	3 x 96 (144 tests)
<b>Eluate tips</b>	2 x 96 (192 tests)

\* Calculated for the addition of 350ul

<sup>†</sup> For 3-4 assays per run

<sup>‡</sup> 2 processing tips are needed per sample

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## 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

## ENVIRONMENTAL REQUIREMENTS (Operating)

Ambient room temperature	15°C to 32°C
Relative humidity	30% to 80% (no condensation)
Altitude	up to 2000 m
Pollution degree	2 (IEC 61010-1)

## DIMENSIONS & WEIGHT

Instrument dimensions	53 x 73 x 32 inches (W x H x D)
Instrument weight	1374 lbs.

## POWER SUPPLY

Line voltage	100-240 VAC +/- 10%
Line frequency	50/60Hz +/- 5%
Maximum power consumption	1600 VA

## 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
- Order/ Result Handling
- User Management
- Configurations for user, assay priority, etc.
- Can be accessed via web browser on laboratory PC

## Contamination Prevention

- Reagent and control covers & smart pipetting pathway
- Pipette tips with CO-RE filter technology
- Single use consumables
- Dedicated pipette tips for each sample transfer and for transfer of extracted nucleic acid
- Automatic heat-sealing of cobas omni Amplification Plate
- Stainless steel pipetting transfers assay specific reagents, controls, and other bulk reagents required for sample preparation and amplification: washed after each use
- No use of bleach on the system

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