



# cobas® 5800 Systems

Specification sheet

# cobas<sup>®</sup> 5800 Systems

## Performance specifications

|   |  |
|---|--|
| <b>Time to first results (up to 24 tests)*</b><br><b>Subsequent runs (24 tests)</b> | 2 hours 30 minutes<br>Every 60 minutes thereafter  |
| <b>Maximum throughput (8 hrs   24hrs)*</b>  | 144   528 tests  |
| <b>Walk-away time*</b>  | 8 hours  |
| <b>Test format</b>  | Plates of up to 24 tests with up to 6 assays per plate<br>Two 24 well thermal cyclers  |
| <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 or auto-release results</li></ol> |
| <b>Support for lab developed tests with the cobas omni utility channel</b>          | Develop and automate your own lab developed tests (LDTs) with up to 24 targets per plate<br>Mixed processing of open channel assays** and Roche IVD assays   |

\*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>                                   | Up to 128 primary or secondary specimen tubes<br>Up to 28 liquid based cytology vials (ThinPrep <sup>®</sup> PreservCyt Solution)<br>Up to 80 samples loaded in 5-position racks |
| <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)†</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

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## Compatible tubes

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

| Tube Size  | Acceptable Measurement (mm) |
|--|-----------------------------|
| <b>Height (without cap)</b>                      | 65-103                      |
| <b>Outside diameter (includes barcode label)</b> | 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

## Dimensions & weight

|                              |                                    |
|------------------------------|------------------------------------|
| <b>Instrument dimensions</b> | 53 x 73 x 32 inches<br>(W x H x D) |
| <b>Instrument weight</b>     | 1374 lbs.                          |

## Environmental requirements (operating)

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

## Power supply

|                                  |                     |
|----------------------------------|---------------------|
| <b>Line voltage</b>              | 100-240 VAC +/- 10% |
| <b>Line frequency</b>            | 50/60Hz +/- 5%      |
| <b>Maximum power consumption</b> | 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



### 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

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