



cobas® 5800 System

System specifications

Performance specifications

Time to first results (up to 24 tests)*
Subsequent batches (24 tests)

cobas® 5800 System

2 hours 45 minutes
Every 60 minutes thereafter

Maximum throughput (8 hrs | 24 hrs)*

144 | 528 tests

Walkaway time

up to 4 hours

Maximum number of tests per run

24 tests including controls; with up to 6 different assays per run

User interactions

1. Load/unload samples, load reagents and consumables as needed
2. Remove waste (solid and liquid)
3. Review and auto-release results

cobas omni Utility Channel

- Consolidate open channel assays** with Roche IVD assays on a single platform
- Develop and automate your own LDTs with up to 24 targets per plate
- Mixed processing of open channel assays and Roche IVD assays

*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

Samples (Standard tubes | RD-5/MPA Racks | Collection medium containers)

cobas® 5800 System

128 | 80 | 28

Assay reagent cassettes

Up to 15 (up to 7,200 tests)

Control mini racks

Up to 16

cobas omni MGP reagent

1 (480 tests)

cobas omni specimen diluent reagent (1 L bottle)***

1 (240 tests)

cobas omni lysis reagent (1 L bottle)

2 (432 tests)

cobas omni wash reagent (4 L Bottle)†

1 (240 tests)

cobas omni processing plates 24

4 (96 tests)

cobas omni liquid waste plates 24

4 (96 tests)

cobas omni amplification plates 24

8 (192 tests)

Processing tips‡

3 x 96 (144 tests)

Eluate tips

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/More info on diagnostics.roche.com)

Compatible tubesTube 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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