

# cobas® prime Pre-analytical System

Specification sheet



# Performance specifications

<b>Available throughput (8 hrs   24 hrs)*</b>	<b>Up to 1600   Up to 4800</b>
Specific throughput	<b>Liquid Based Cytology - Throughput 96/h</b> <ul style="list-style-type: none"><li>ThinPrep® PreservCyt Solution</li><li>User Defined Workflow</li></ul> <b>Primary Tubes - Throughput 200/h</b> <ul style="list-style-type: none"><li>Decapping</li><li>Recapping for archiving</li></ul>
<b>Work-away time*</b>	<b>Up to 6.5 hours (continuous loading supported)</b>
User interactions	<ul style="list-style-type: none"><li>Load/unload samples</li><li>Load consumables</li><li>Load reagents (optional Process Plus Module only)</li><li>Unload solid and liquid waste</li><li>Address samples with processing errors directly at the workbench or via error tray</li><li>Change barcode label materials</li></ul>
<b>cobas® prime</b> User Workflow	Preform fully automated standardized user workflows. Configurable parameters: <ul style="list-style-type: none"><li>Tube type ID</li><li>Sample Integrity Checks</li><li>Vortexing</li><li>Decapping</li><li>Barcode labeling</li><li>Aliquoting</li><li>Recapping</li><li>Recursive recapping workflow</li><li>Heat treatment** (configured to heat samples to a predefined temperature (35-120°C) and keep it constant for the required time).</li><li>Cooling**</li><li>Reagent addition**</li></ul>
Sample type compatibility	<ul style="list-style-type: none"><li>Liquid-based cytology samples</li><li>Urine in <b>cobas®</b> PCR Media Urine</li><li>Swab in <b>cobas®</b> PCR Media Swab</li><li>Serum/plasma</li><li>Whole blood</li><li>Native urine</li></ul>

# Onboard inventory

Samples (in universal trays)	Liquid-based cytology container up to 380 or Primary tubes up to 1240
Pipette tips (per tray)	Up to 384 tips in 4 tip trays
Secondary tubes (per tray)	Up to 170 tubes
Total tray storage	Up to 22 trays
Flexible caps	Up to 500 pieces

\*May vary based on workflow demands and tube type

\*\*Note that functionality for customers to create their own user-defined workflows, for a vial within specifications, will be available under the responsibility of the customer

## Onboard inventory (continued)

5-position-racks	105 racks with stabilizers
Reagent bottles* (loaded in pairs of the same reagent)	6 x 1 L bottles (3 pairs)
Overview of reagents:	
<b>cobas</b> <sup>®</sup> sample preparation buffer	Up to 4 bottles
<b>cobas</b> <sup>®</sup> PCR media	Up to 4 bottles
<b>cobas</b> <sup>®</sup> Specimen Pre-Extraction Reagent (SPER)	Up to 4 bottles
<b>cobas</b> <sup>®</sup> <b>prime</b> User Workflow Reagent Bottle (UWRB)	Up to 2 bottles (Reagent bottle for user workflow)
Liquid waste container	1 container

## Barcode types supported (1-23 characters)

1D barcodes**	<ul style="list-style-type: none"><li>• Codabar</li><li>• Code 128</li><li>• Code 39</li><li>• Code interleaved 2 of 5 (with checksum)</li><li>• Code 93</li><li>• Code EAN-8</li><li>• Code EAN-13 (including JAN code)</li></ul>
2D barcodes**	<ul style="list-style-type: none"><li>• QR Code</li><li>• Data matrix</li><li>• PDF417</li><li>• AZTEC</li></ul>

## Compatible sample containers

Size	Acceptable measurement (mm)
Tube height	65 - 100
Tube outside diameter (includes barcode label)	12.5 - 16 (+/- 0.8mm)
LBC height	52.4 - 75.4 (+/- 1.14mm)
LBC diameter	12.5 - 16 (+/- 0.8mm)

## Power supply

	Without Process Plus Module (PRP)	With Process Plus Module (PRP)
Line voltage	1 phase 100-125 VAC +/- 10% 16 A or higher socket	1 phase 100-125 VAC +/- 10% 16 A or higher socket
Line frequency	50/60Hz +/- 5%	50/60Hz +/- 5%
Maximum power	1600 VA	3200 VA
Insulation coordination	Installation category II (IEC 61010-1)	

\*Reagents are only used in User Defined workflows

\*\*The **cobas**<sup>®</sup> **prime** Pre-analytical System supports ASCII codes 32-126 in the barcode

# Environmental requirements (operating)

Ambient temperature	15°C (59°F) to 30°C (86°F)
Ambient humidity	15% to 85% (no condensation)
Altitude	up to 2000m (6562 ft)
Noise emission	below 65 dB (A) peak noise level 55 dB during operation

# Dimensions & weight

## cobas® prime Pre-analytical System without Plus Module

**Dimensions:** 87 x 69 x 86 in (W x D x H)  
Depth including workbench 71.25"  
**Weight:** 2541 lbs.

## cobas® prime Pre-analytical System with Plus Module

**Dimensions:** 111 x 69 x 86 in (W x H x D)  
Depth including workbench 71.25"  
**Weight:** 3366 lbs.

# Connectivity

Host connectivity  
(LIS, Middleware, etc.)  
navify® Lab Operations required

HL7 through TCP/IP, bidirectional communication

- Query for sample orders (LAB-22)
- Sample order status change (LAB-26: Sample status, Sample integrity status, primary and secondary sample location)

Roche remote support

- Upload anonymized statistics for preventive maintenance
- Screen sharing for remote support

# Time to get started and maintenance times

Action	Duration (min)
Power on	5
System ready to run	10
<b>Maintenance</b>	
Weekly cleaning	30
Short shutdown	60 (20 per position)
Extended shutdown	90 (30 per position)
Change of barcode label roll and printer ribbon	15
Change of reagent type (per position)	20

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