

# cobas<sup>®</sup> 4800 System

## Technical specifications

### cobas x 480 Instrument

The **cobas x 480** instrument is designed for automated multi-channel pipetting used to extract, purify and prepare target nucleic acid for subsequent real-time PCR testing on the **cobas z 480** analyzer.

#### NOTICE

The type and specification of the barcode scanner are subject to change without notice. The specifications listed apply to the type and specification provided at the time of publication of the Operator's Manual.

#### Physical dimensions

Width	Depth	Height	Weight
65.55 in (166.5 cm)	30.5 in (77.5 cm) instrument base	35.6 in (90.5 cm)	397 lb. (~180 kg)
	39.76 in (101 cm) w/autoload tray		
	47.2 in (120 cm) w/carriers on autoload tray		

#### Power requirements

Line voltage	115 VAC (-15%) to 230 VAC (+10%)
Line frequency	50 or 60 Hz (±5 Hz)
Power consumption	Max. 600 VA
Installation category	II
Fuses (delayed action)	115 V~: 6.3 A 230 V~: 3.15 A

#### Environmental conditions

Temperature	Running conditions: 59°F to 86°F (15°C to 30°C) Transport/storage: -13°F to 158°F (-25°C to 70°C)
Humidity	Running conditions: 15% – 85%, without condensation
Noise	<65 dBA
Pollution	Level 2 (EN 61010-1, IEC 60664-1)
Altitude	100 – 6,500 ft (30 – 2,000 m) above sea level

#### Interfaces

User interface	<b>cobas</b> 4800 software running on <b>cobas</b> 4800 software control unit
Instrument interface	<b>cobas x 480</b> instrument is connected to the <b>cobas</b> 4800 software control unit through a USB connection; place the software control unit close to the instrument and use the originally delivered USB cable only

#### Waste

Solid waste	<ul style="list-style-type: none"> <li>Small waste bag holds used pipetting tips for 1 full run (maximum)</li> <li>Large waste bag holds used pipetting tips for 3 full runs (maximum)</li> </ul>
Liquid waste	Liquid waste container holds liquid waste

#### Barcode Scanner

Barcode types	<ul style="list-style-type: none"> <li>Codabar (w/out check sum)</li> <li>Code 39 (w/out check sum)</li> <li>Code 128, subset B and C (w/check sum)</li> </ul>
Supported characters (Code 128 B and C)	SP!"#\$%&'()*+,-./1234567890:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{ }~
Not supported characters (Code 128 B and C)	+, [Del
String length	Max 20 characters, excluding start, stop and check characters (depends on label length)
Code density tolerance	Best reading performance with X dimension between 0.0075 in (0.19 mm) and 0.01 in (0.25 mm)
Quiet zone	≥ 10 times the X dimension, at least 0.12 in (3 mm)
Print quality	<ul style="list-style-type: none"> <li>Printing with ANSI/CEN/ISO grade A or B required</li> <li>Suitable for offset, typographic, intaglio and flexographic printing</li> <li>Not suitable for mechanical dot-matrix and thermomatrix printing</li> </ul>

#### Heater/shaker unit

Line voltage	100 – 240 VAC
Line frequency	50 – 60 Hz
Consumption	70 VA

Every effort has been made to ensure that all the information contained in these specifications is correct. However, Roche reserves the right to make any changes necessary without notice as part of ongoing product development.



# cobas<sup>®</sup> 4800 System

## Technical specifications

### cobas z 480 Analyzer

The **cobas z 480** analyzer is designed to perform real-time PCR amplification and detection.

Physical dimensions	Width	Depth	Height	Weight
	22.6 in (57.4 cm)	23.1 in (58.8 cm)	19.6 in (49.7 cm)	121.25 lb. (55 kg)
Power requirements	31.1 in (79 cm) w/extended microwell plate loader			
	Line voltage	200 - 240 VAC		
	Line frequency	50 or 60 Hz		
	Power consumption	1,500 VA		
	Fuses (delayed action)	Primary fuses: • 250 V/T10 A	Secondary fuses: • F1: 250 V/T3.15 A • F2: 250 V/T8 A • F3: 250 V/T16 A	
Environmental conditions	Lamp fuse: 250 V/T2.5 A			
	Temperature	• Running conditions: 59°F to 90°F (15°C to 32°C) • Transport/storage: -13°F to 140°F (-25°C to 60°C)		
	Humidity	Running conditions: • Max 80% at 90°F (32°C), w/out condensation • Min 30% at 59°F to 90°F (15°C to 32°C)		
	Noise	<60 dBA		
	Altitude	0 - 6,500 ft (0 - 2,000 m) above sea level		
Interfaces	User interface	cobas 4800 software running on the cobas 4800 software control unit		
	Instrument interface	cobas z 480 analyzer is connected to the cobas 4800 software control unit through an Ethernet LAN		

### cobas x 480 System control unit

#### NOTICE

The type and specification of the control unit and the barcode scanner are subject to change without notice. The specifications listed below apply to the type and specification provided at the time of publication of the Operator's Manual.

#### Physical dimensions

Width	Depth	Height
7 in (17.8 cm)	23.1 in (58.8 cm)	18 in (45.7 cm)

#### Software

Operating system	Microsoft Windows <sup>®</sup> XP Professional, SP 2
Database	Oracle Database Enterprise Edition

#### Handheld barcode scanner

Type	IT4600
Interface	Handheld scanner connected to control unit through keyboard interface
Skew angle	± 40°
Pitch angle	± 40°
Motion tolerance	4 in (10 cm) per second
Scan contrast	45% minimum for Matrix codes 37.5% minimum for all others
Temperature	Operating: 32°F to 122°F (0°C to 50°C) Storage: -40°F to 158°F (-40°C to 70°C)
Humidity	0% - 95% non-condensing

### UPS (Uninterrupted Power Supply)

#### Physical dimensions

Width	Depth	Height
11.8 in (30 cm)	31.9 in (81.1 cm)	28.9 in (73.4 cm)

#### Power requirements

Line voltage	Dedicated 220 VAC ± 10%
Line frequency	50 or 60 Hz
Connection	NEMA 6 - 20R

For more information, contact your Roche Molecular Diagnostics Representative, visit [www.MyLabOnline.com](http://www.MyLabOnline.com) or call 1-800-981-8863.

COBAS, COBAS X, COBAS Z, LIFE NEEDS ANSWERS and MYLABONLINE are trademarks of Roche.  
All other product names and trademarks are the property of their respective owners.

©2011 Roche Diagnostics. All rights reserved. 472-50507-0411

Roche Diagnostics  
9115 Hague Road  
Indianapolis, IN 46256  
[www.MyLabOnline.com](http://www.MyLabOnline.com)