QuantuMDx

Multiplex Diagnostics for the Real World

Q-POC™

**Rapid, High Quality
Point of Need PCR Testing**

quantumdx.com

QuantuMDx

Designed for use at the Point of Need

Q-POC™ was designed for use in a range of real-life settings.

Safe
Sealed, single use test cassette designed to reduce contamination risk

Confidence in results
Built-in quality control

Convenient
On-board reagents are lyophilised for room temperature storage, shipping and longer shelf-life

Multiplex capability
Uses microfluidics to perform rapid, six channel PCR testing in real-time

Ease of use
Can be used by any trained healthcare professional

Portable
Light weight and battery operated

Automated Reporting
Integration allows ease of use reporting

Rapid Results you can Trust at the Point of Need

Individuals are tested, diagnosed and given options in one efficient consultation

Portable and simple to use, the Q-POC™ platform is a rapid multiplex PCR testing system that delivers rapid, accurate and actionable results at the Point of Need

The entire test is contained in a sealed cassette, reducing risk and increasing staff productivity
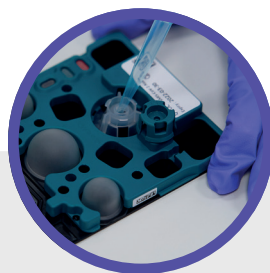

SINGLE-USE CASSETTE

01 —— Shuttle-flow PCR
02 —— Future microarray
03 —— Onboard dried reagents
04 —— Cap
05 —— Sample input
06 —— Future reagents

Make informed decisions faster

Reduce operational downtime and improve operational efficiency

Conserve limited isolated areas and resources

Streamline patient pathway management

Reduce admissions and bed blocking in hospitals

Ease overburdened healthcare systems

Q-POC™ is as Safe as it is Simple to use

The Q-POC™ platform has been engineered to limit the need for highly skilled operators. Each test requires only a few minutes hands-on-time to get your test started, using easy to follow, guided workflows on the touch screen.

ONE TO THREE-MINUTES HANDS ON TIME

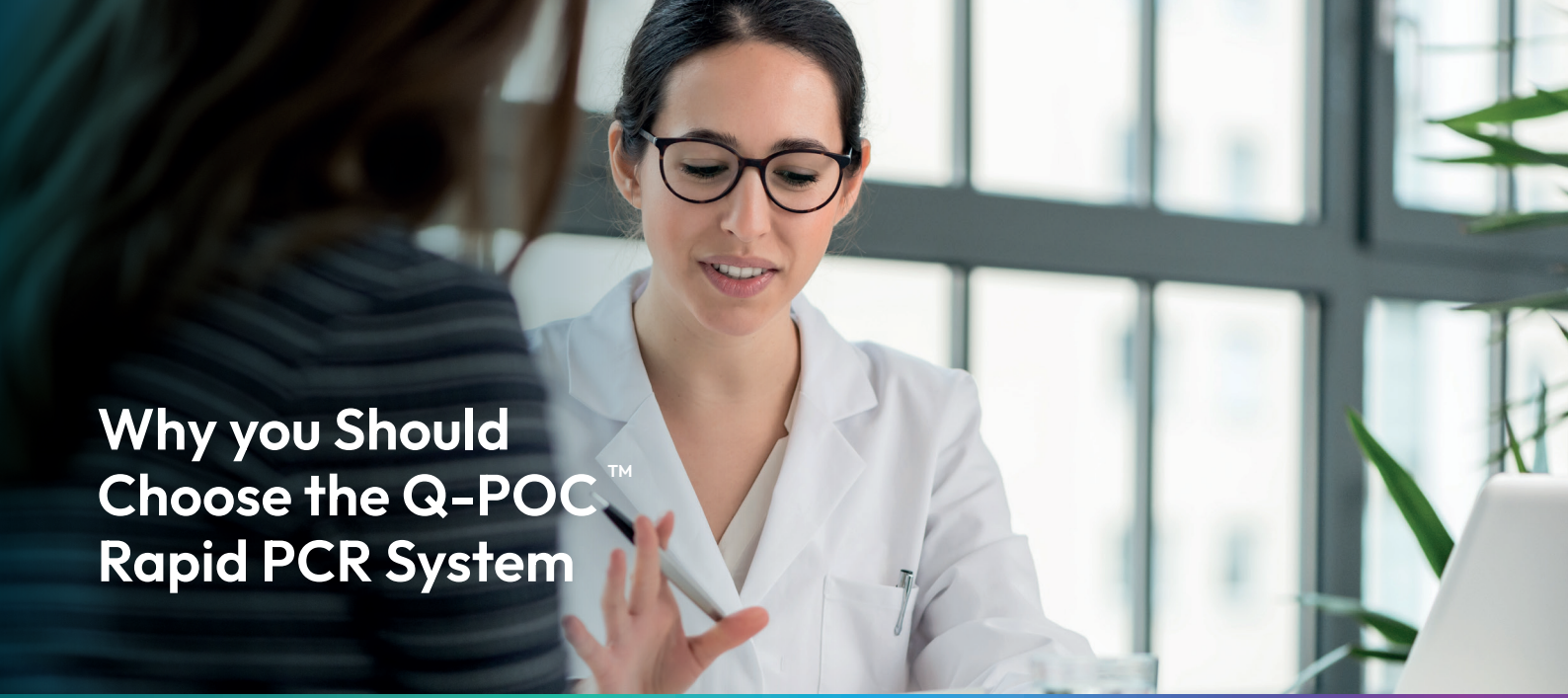**TEST RESULTS IN AS LITTLE AS 30 MINUTES***

Collect sample

Put swab in tube, cap & invert five times

Transfer sample to cassette

Insert into the Q-POC and press GO

Read results and view curves. Seamless LIS integration

*Assay dependent

Why you Should Choose the Q-POC™ Rapid PCR System

Testing that fits your needs

The Q-POC™ system delivers rapid, accurate results with minimal effort or specialised skills, in a portable, compact design, providing you with the answers you need, when you need them, where you need them.

Point of Need Testing

- The Q-POC™ solution is light, and battery operated offering a portable solution
- The entire test is contained in a sealed cassette, reducing risk and increasing staff productivity
- Connectivity to standard Laboratory Information Systems (LIS) for transfer of results
- Ethernet and WiFi enable connectivity

Rapid

- Tests are simple to perform, using easy to follow guided workflows
- Operators can collect and process specimens in under three-minutes
- Intuitive, user-centric multi-lingual software design - like a smartphone

Results you can Trust

- 6 channel multiplex
- PCR
- Built in quality controls

Q-POC™ Features

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01. Rapid time to result

- Minimal hands-on time for specimen preparation
- Test results in as little as 30 minutes*

02. Intuitive user interface

- Large, responsive seven inch wide-screen touch display
- Tests are simple to perform, using easy to follow guided workflows
- Simple, intuitive, software available in local languages

03. Small footprint

- 24cm (W) x 30cm (D) x 20cm (H)

04. Portable

- Less than 8kg

05. Power options

- Mains operated
- Internal battery - Up to five runs on a full charge
- Seamless transition between mains and battery in the event of a power disruption

06. Closed system

- Reduced contamination risk
- Fully sealed cassettes
- Reagents integrated into the test cassettes

07. Multiple connectivity options

- Laboratory Information Systems (LIS), LAN, 3G, 4G and WiFi

08. Integrated barcode scanner

- Identifies test cassettes and initiates the test run process

09. Optional Bluetooth connected printer

*Assay dependent

About QuantuMDx

QuantuMDx is a progressive MedTech company passionate about empowering the world to control disease and reduce suffering.

QuantuMDx solve real-world diagnostic problems by creating multiplex molecular solutions for the Point of Need.

QuantuMDx has global operations and strategic partnerships – keeping it at the forefront of molecular diagnostics.

Q-POC™ System Technical Specifications

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Physical properties		
	Dimensions	(W x H x D) 24 x 20 x 30cm
	Weight	<8 kg
	Operating languages	Multilingual
	Memory storage	128GB of internal SSD memory

Analysis method		
	Sample preparation	Direct-to-PCR
	Amplification & detection	Qualitative RT-PCR

Maintenance		
	Calibration	None required
	Maintenance	Daily cleaning, periodic fan filter inspection/replacement, air exhaust filter replacement and battery replacement.
	Power saving	Auto-sleep

Safety		
	Cross contamination	Sealed, self-contained, single use cassette
		Minimal risk of cross contamination
	Security	Automatic and manual screen lock options
		Password-protected user login

Functional specifications		
	Fluorescence detection channels	6
	Light source	Light Emitting Diodes (LED)
	Temperature hold accuracy	± 0.15°C for hold times up to 1 hour
	Optics	AF350, FAM, HEX, ROX, CY50, AF750

Operational conditions		
	Temperature	5 – 45 °C
	Relative humidity	Up to 95% relative humidity (non-condensing)
	Altitude	–500 meters to 2000 meters above sea level
	Orientation	≤ 5 degrees from horizontal – any direction
	Atmospheric pressure	0.76 – 1.03 Bar (76 – 103 kPa)

Electrical specifications		
	Power requirements	100 – 240 Vac; 50 – 60 Hz; 19 Vdc; < 4.74 A
	Battery life	Up to 5 test runs
	Internal battery	Lithium ion; 6900mAh; 99.4Wh capacity
	Power mode	Seamless transition between mains and battery, in event of power disruption

User interface		
	Interactive display	7-inch-wide super VGA LCD colour touch display with LED backlighting
	Display resolution	1024 x 600 pixels
	Barcode reader (integrated)	Supports Data Matrix (ECC200)
	Data export	2x USB 2.0 port
		Ethernet
		Wi-fi
	LIS integration	Unidirectional communications via Ethernet network or WiFi connection
	Audible alert	<70dBa at 1m
	Printer	Optional Bluetooth thermal printer available

* Altitude must be within operational atmospheric pressure range