

## MC/CYN Gen 2 HAB Toxin Cartridge Specifications

## **OVERVIEW**

The LightDeck MC/CYN Gen 2 HAB Toxin Cartridge is designed to measure microcystins (MC), nodularins (NODR), and cylindrospermopsins (CYN). The Cartridges are measured in the LightDeck Mini and quantitative results in the assay range are reported.



The Cartridges are single use and disposable. The user adds 100  $\mu$ L of sample to the inlet port of the cartridge. After inserting the cartridge into the LightDeck Mini, the user can walk away as the LightDeck Mini controls all successive functions of timing a 10-minute incubation period and reading the results, which are digitally displayed.

The MC/CYN Gen 2 HAB Toxin Cartridge is designed to be simple to use and is intended for use by a broad user base, specifically any individuals trained in the proper handling of the samples that are added to the Cartridge.

## **SPECIFICATIONS**

Cartridge Series	A-Series
Compatible Reader	LightDeck Mini
Dried Reagents	Contained in microtube contained in cartridge package
Dimensions	For 1 cartridge: 4.25" D x 1" W x 0.25" H (10.8 cm D x 2.5 cm W x 0.6 cm H)
	Kit of 25 cartridges: 8.625" x 7.625" x 3.0" (21.9 cm D x 19.4 cm W x 7.6 cm H)
Weight	For 1 cartridge: 0.3 oz (8 g)
	Kit of 25 cartridges: 1 lb (0.5 kg)
Operating Environment	• 10-32°C (50-90 °F)
	10-85% relative humidity
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Storage Environment in	• 2-8°C (36-46 °F)
Original Packaging	<ul> <li>Temperatures 8-35°C (46-95 °F) are acceptable for up to 8 hours</li> </ul>
	10-85% relative humidity
	•
Calibrations	Factory calibrated with no further calibration or verification needed. Calibration
	is suppled on an USB Flash Drive
Typical Assay Range	• MC 0.5-5 μg/L
	• CYN 0.7-3 μg/L

## **REFERENCES**

An Innovative Portable Biosensor System for the Rapid Detection of Freshwater Cyanobacterial Algal Bloom Toxins

Sarah R. Bickman, Katrina Campbell, Christopher Elliott, Caroline Murphy, Richard O'Kennedy, Philip Papst, and Michael J. Lochhead

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