



# Opentrons COVID-19 Testing System

The Opentrons COVID-19 Testing System is a flexible, high-throughput surveillance testing system using OT-2 hardware & validated with Zymo reagents to process up to 2,400 samples per day.

## PRODUCT DESCRIPTION

- One of the most affordable & flexible systems on the market
- Reagent kit agnostic and customizable
- Ships worldwide
- Open documentation free on [GitHub](#)
- Includes remote setup and support

The Opentrons COVID-19 Testing System is a flexible, high-throughput surveillance testing system using the Opentrons OT-2 liquid handling robot, hardware modules, and verified labware.

The system is customized to meet your specific needs—meaning you can use it with the reagent kit and consumables of your choice without being locked into using a specific provider.

## KIT COMPATIBILITY

Automating viral RNA extraction for SARS-CoV-2 can be done using the Opentrons platform. The platform is open-source so any lab can use it, customizable for different workflows, and kit agnostic. While many of our customers use the popular Zymo Quick-DNA/RNA Viral Kit, we've validated and utilized a wide variety of SARS-CoV-2 RNA extraction kits on the OT-2. Examples are listed nearby, but we are able to automate nearly any magnetic bead based kit.

## SARS-CoV-2 Viral Extraction Kits with Pre-written Protocols

COMPANY	NAME
Zymo	<a href="#">Quick-DNA/RNA viral kit</a>
ThermoFisher	<a href="#">Viral/Pathogen MagMAX Ultra nucleic acid isolation kit</a>
Beckman Coulter	<a href="#">RNAdvance Viral Kit</a>
Omega Biotek	<a href="#">Magbind Viral DNA/RNA Kit</a>
BPG PureBase	<a href="#">Viral RNA kit</a>
Seegene	<a href="#">Universal Extraction System</a>
Bio-Helix	<a href="#">RNA Extraction Kit</a>
MGI	<a href="#">MGIEasy Nucleic Acid Extraction Kit</a>
Clean NA	<a href="#">Clean Viral DNA &amp; RNA Kit</a>
Promega	<a href="#">Maxwell® HT Viral TNA Kit, Custom</a>

**Don't see your kit listed? We can support any SPRI bead based workflow, contact us to learn more!**

# The Set Up

This system is made of 3 stations that can be ordered individually to complement an existing setup, or together to create a testing workflow from scratch.



## STATION A

### Sample Plating

96 samples = 1.45 hrs

- 3x OT-2s
- 2x Opentrons GEN2 Single-Channel pipettes
- Temperature Module
- Labware (tube racks, 96 deep well extraction plate, 1x filter tips + racks)

**\$26,250**

(\$3.50/sample)

## STATION B

### RNA Extraction

96 samples = 3 hrs

- 6x OT-2s
- 1x Opentrons GEN2 8-channel pipette
- Magnetic Module
- Temperature Module (Optional)
- 96 deep well extraction plate
- Labware (96 deep well extraction plate, 96 well elution plate, 5x filter tips + racks, 2x 12-channel reagent reservoirs, 2x 1-channel liquid trash reservoirs)

**\$12,000**

(\$2.00/sample)

## STATION C

### qPCR Setup

96 samples = 0.3 hrs

- 1x OT-2s
- 1x Opentrons GEN2 Single-Channel pipette
- Temperature Module
- Labware (96 well elution plate, 96 well PCR plate, 3x filter tips + racks)
- 1x Opentrons GEN2 8-Channel pipette (Optional)

**\$95,000**

(\$3-\$10/sample)

## FULL WORKSTATION

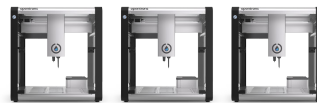
### COVID-19 Testing System

The full testing system includes Station A, Station B, and Station C and is the best overall value.

**\$120,000**

(\$22,750 discount from purchasing individually)

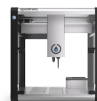
STATION A



STATION B



STATION C



If you are interested in learning more about any part of this system, please email [covid-19@opentrons.com](mailto:covid-19@opentrons.com)