



Magnetic Block GEN1

MAGNETIC BLOCK FEATURES

The Opentrons Magnetic Block GEN1 is a magnetic 96-well plate. The wells consist of 96 high-strength neodymium ring magnets fixed to a spring-loaded bed, which helps maintain tolerances between the block and pipettes while running automated protocols. It is unpowered, does not contain any electronic components, and does not move magnetic beads up or down in solution.

Magnetic blocks are used in protocols that rely on magnetism to pull particles out of suspension and retain them in well plates during wash, rinse, or other elution procedures. For example, automated NGS preparation, purifying genomic and mitochondrial DNA, RNA, proteins, and other extraction procedures are all use cases that can involve magnetic blocks.

MAGNETIC BLOCK COMPATIBILITY

The Magnetic Block GEN1 works with the Opentrons products and services listed below.

CATEGORY	COMPATIBLE WITH
Hardware	<ul style="list-style-type: none">▪ Opentrons Flex liquid handling robot▪ Opentrons Gripper
Labware	<ul style="list-style-type: none">▪ Opentrons Tough 0.2 mL PCR well plate (full skirt)▪ NEST 2 mL 96 Deep Well Plate
Software	<ul style="list-style-type: none">▪ Python API protocols▪ Protocol Designer

MAGNETIC BLOCK SPECIFICATIONS

Dimensions	136 × 94 × 45 mm (l/w/h)
Weight	1.13 kg
Module Power	None, module is unpowered
Environmental Conditions	Indoor use only
Ambient Temperature	20–25 °C
Relative Humidity	30–80%, non-condensing
Altitude	Up to 2000 m above sea level
Pollution Degree	2

SOFTWARE CONTROLS

The Magnetic Block GEN1 is fully programmable in Protocol Designer and the Python Protocol API.

Outside of protocols, however, the touchscreen and the Opentrons App *are not* aware of and *cannot* display the current status of the Magnetic Block GEN1. This is an unpowered module. It does not contain electronic or mechanical components that can communicate with the Flex robot. You “control” the magnetic block via protocols that use the Opentrons Flex Gripper to add and remove labware from this module.



For cleaning, warranty, and other support information, scan the QR code or search for “Magnetic Block” on support.opentrons.com.

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