



# GEN1 Opentrons Flex Magnetic Block Instruction Manual

[Home](#) » [opentrons](#) » GEN1 Opentrons Flex Magnetic Block Instruction Manual 

## GEN1 Opentrons Flex Magnetic Block Instruction Manual



### Contents

- [1 MAGNETIC BLOCK FEATURES](#)
- [2 MAGNETIC BLOCK COMPATIBILITY](#)
- [3 The Magnetic Block GEN1 works with the Opentrons products and services listed below.](#)
- [4 MAGNETIC BLOCK SPECIFICATIONS](#)
- [5 SOFTWARE CONTROLS](#)
- [6 Documents / Resources](#)
  - [6.1 References](#)
- [7 Related Posts](#)

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

## 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](https://support.opentrons.com).




pentrons Flex™ (Opentrons Labworks, Inc.) Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

© Opentrons 2023, all rights reserved.



Documents / Resources

	<a href="#">Opentrons GEN1 Opentrons Flex Magnetic Block</a> [pdf] Instruction Manual GEN1 Opentrons Flex Magnetic Block, GEN1, Opentrons Flex Magnetic Block, Flex Magnetic Block, Magnetic Block, Block
--	--

References

- [Opentrons Help Center](#)
- [NEST 2 mL 96-Well Deep Well Plate, V Bottom “ Opentrons](#)
- [Opentrons Tough 0.2 mL 96-Well PCR Plate, Full Skirt \(25 count\)](#)