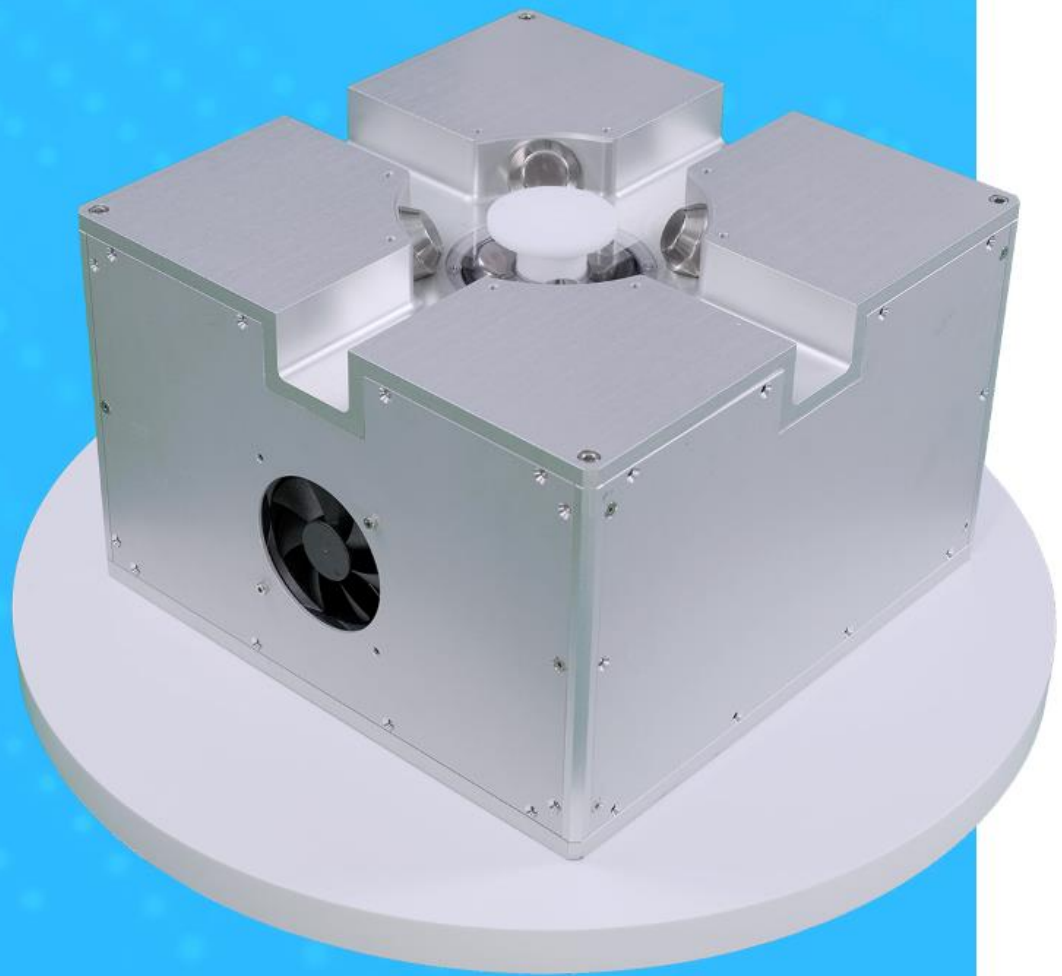


RULE THE MAGNETIC FIELD

IM_3D MAG _LAB

A 3D MAGNETIC FIELD CONTROL SYSTEM
FOR LABORATORY-SCALE RESEARCH



E-mail

info@imsystem.kr

Homepage

<http://imsystem.kr>

 **IMSYSTEM**
에이엠시스템



Description

The IM_3D MAG_LAB generates and controls a wide variety of 3D magnetic fields for precise actuation of your magnetic materials.

System Capabilities

- Constant magnetic field
- Rotating magnetic field
- Magnetic field gradient
- Programed magnetic field application
- Current and temperature sensing in real time
- Five-degree-of-freedom (5-DOF) magnetic control: 3-DOF in X, Y, Z translations and 2-DOF of rotation

Details of the Overall System

Electromagnetic Coils

3D magnetic field generation

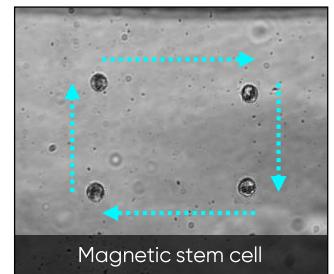
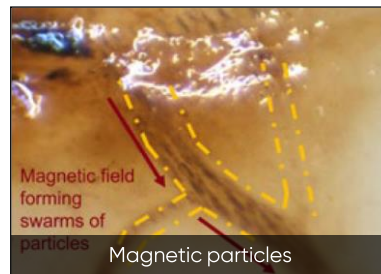
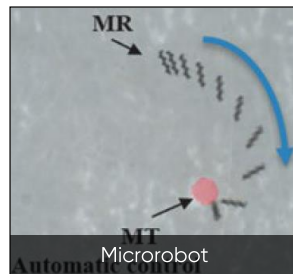
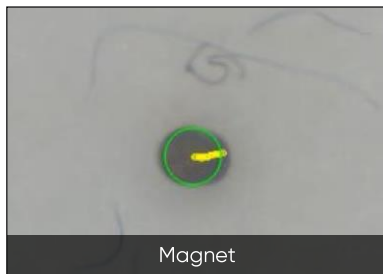
Electronic Control Box

Calculation & control

Graphical User Interface Software

Visualization & navigation

Active Manipulation of Magnetic Materials



Details of the Overall System

Maximum magnetic field	20 mT
Maximum frequency of rotating magnetic field	25 Hz
Workspace	1 cm ³
External dimension	32W×32L×21H (cm)

Options

- Top & side cameras
- An anti-vibration table
- A 3D magnetic field visualization device
- A live cell imaging system
- Customized control units (e.g., a 3D mouse)

Research Publications (from our collaborators, incl. DGIST)

