

Quantum Cores

Whether you are building your first experiment or probing new ideas, Inflection has the complete solution for your cold atom research.

Atomic Prisms

UHV glass cells with AR coatings optimized for common cooling wavelengths and superior flatness performance.



Cold Atom Source Cell (CASC)

The CASC provides a high flux of laser-cooled atoms via pinhole to any cold atom experiment. Available in Rb, Cs, or both.



Picas

A compact, alignment-free beam delivery package for 2D MOT generation. Available as fixed magnets or adjustable coils configuration for complete 2D MOT customization.



miniMOT V2

Compact, off-the-shelf trapped atom vacuum system to create and control quantum matter. Available in Rb or Cs.



Four-Channel Coil Driver + TriCoil

Reliable current driver designed to control and operate the TriCoil magnet assembly, a space-efficient, magnetic field generator for 3D MOT creation.



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Contact Us
for More Info

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For over 16 years, Inflektion has been the trusted supplier of high-precision components for cold atom research worldwide. To accelerate your research, Inflektion offers the doubleMOT, ready to perform upon delivery, as well as proven UHV components that form a complete solution for cold atom experiments.

doubleMOT

The workhorse of the cold atom laboratory, the doubleMOT is a self-contained, tabletop, UHV system that forms the backbone of Inflektion's complete cold atom solution

01 TriCoil
Space-efficient magnetic field generator for cooling and trapping experiments
*add on

02 UHV Glass Science Cell
Where the science happens. Optimized for optical flatness and AR-coated for common cooling wavelengths

03 Self-contained Vacuum System
Shipped under vacuum for immediate use - no need to further assemble, bake, or evacuate using external pumps

04 Integrated Ion Pump
Maintains pressures < 0.8 nTorr for UHV applications

05 2D MOT Magnets
Magnetic field gradient optimized for 2D MOT generation
*add on

06 Cold Atom Source Rb or Cs
The core of the high-flux atom delivery system

07 Picas
Turn-key 2D MOT generation for the cold atom source
*add on



Physics Platform

Designed specifically for the doubleMOT, the system provides accurate and seamless laser beam delivery for 2D and 3D MOT generation



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