

# Physics Platform

## PRODUCT HIGHLIGHTS

- Accessible layout and access for user applications
- Pre-aligned optics for rapid deployment
- Robust structure and integration
- Configuration optimized for rubidium or cesium

The Physics Platform is a highly flexible, complete opto-mechanical package to enable the production of cold atom samples in a RuBECi or doubleMOT vacuum system. The platform consists of two stages: a 2D+ MOT stage for producing 2D MOT in the lower chamber; and a six-beam stage for creating a 3D MOT in the science chamber. Optics for optical pumping and imaging of cold atoms in the science chamber are included. The platform provides users with increased flexibility to modify and expand the optical system.



## PRODUCT SPECIFICATIONS

Dimensions	61 cm x 61 cm x 35 cm 24 in x 24 in x 14 in
Wavelength Options	780 nm or 852 nm
Imaging	Absorption Imaging System (optional)
Optical Inputs	4x FC/APC fiber optic inputs

## PRODUCT OPTIONS

2D and 3D MOT	CP1XXX
2D MOT Only	CP2XXX
3D MOT Only	CP3XXX

"X" notes wavelength/species type

## RECOMMENDED LASER SPECIFICATIONS – for optimal MOT creation

Beam	2D MOT	3D MOT	Pumping	Imaging
Power (mW)	30-70	30-50, Repump 3-6	<1	<1
Beam Dimensions (1/e <sup>2</sup> )	15 x 22.5 mm	15.8 mm	7.5 mm	11 mm



Scan the QR code or click the link below to see the physics platform in action with the doubleMOT!

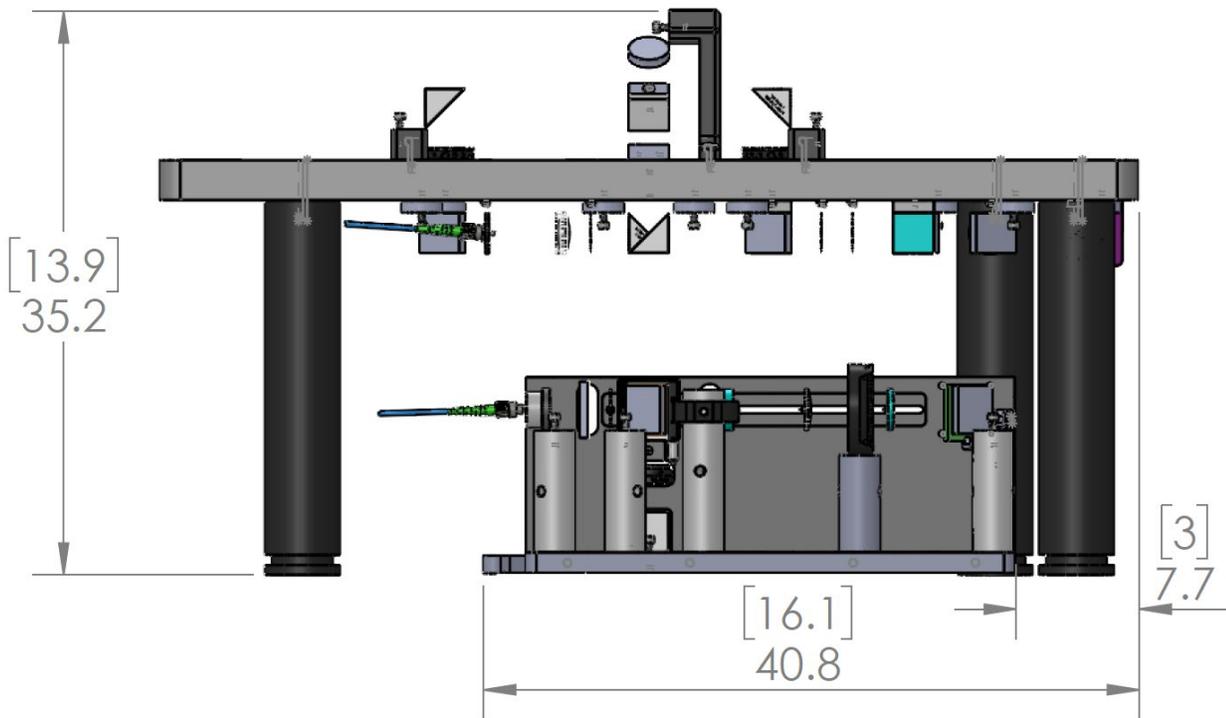
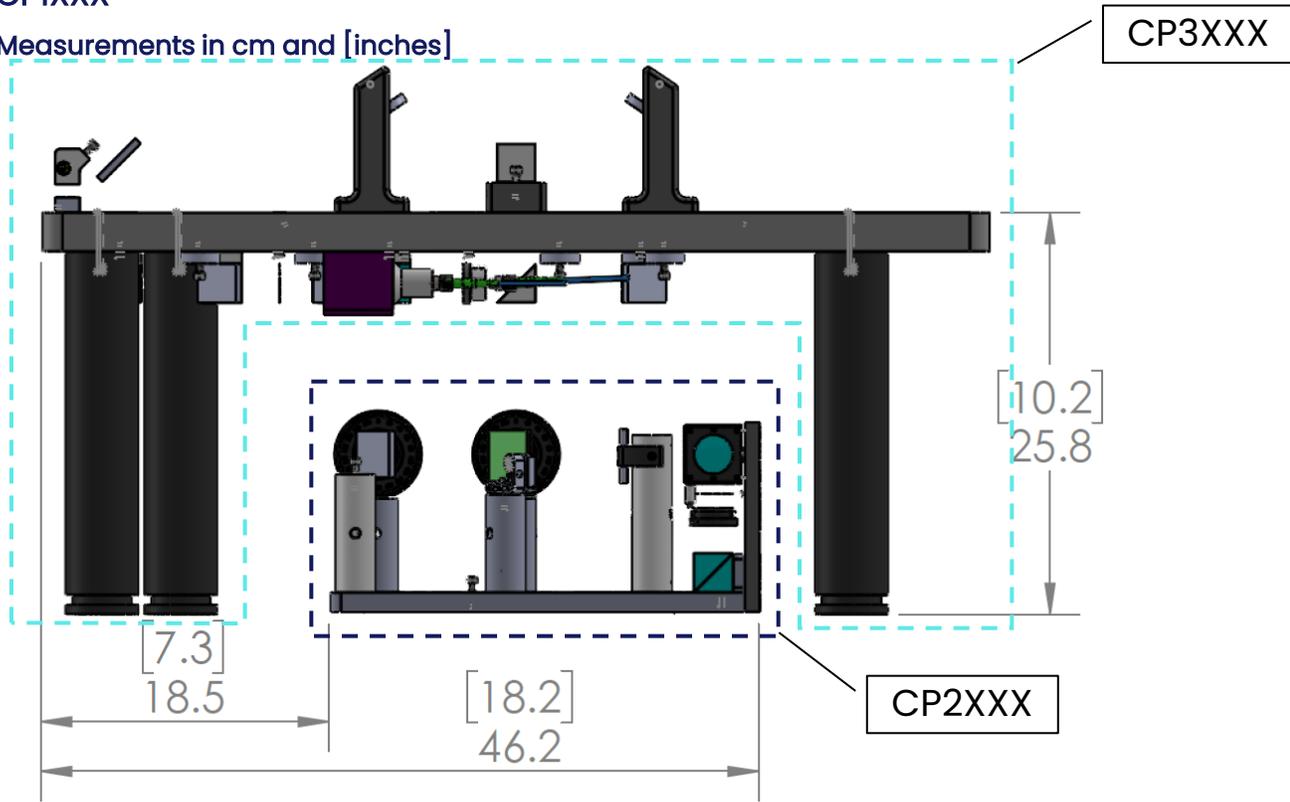
[doubleMOT AR Tour](#)

For more information,  
please contact  
[sales@infleqtion.com](mailto:sales@infleqtion.com)

# MECHANICAL DRAWINGS: HARDWARE

CPIXXX

Measurements in cm and [inches]

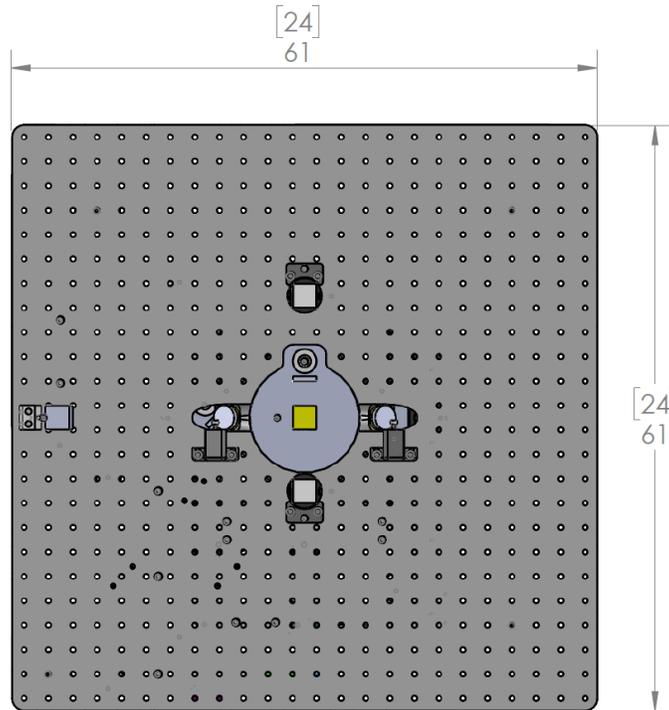


UNCONTROLLED SALES DRAWING

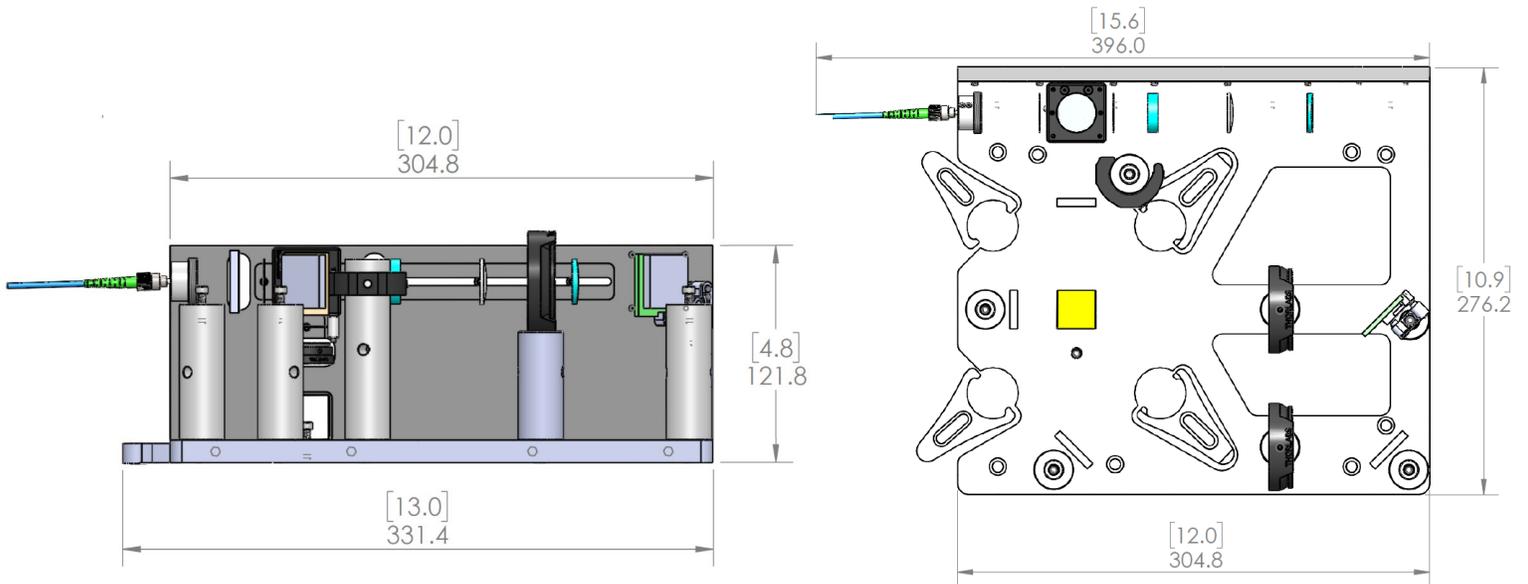
For more information, please contact [sales@infleqtion.com](mailto:sales@infleqtion.com)



**MECHANICAL DRAWINGS**  
**3D MOT OPTICS**



**2D MOT OPTICS**



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