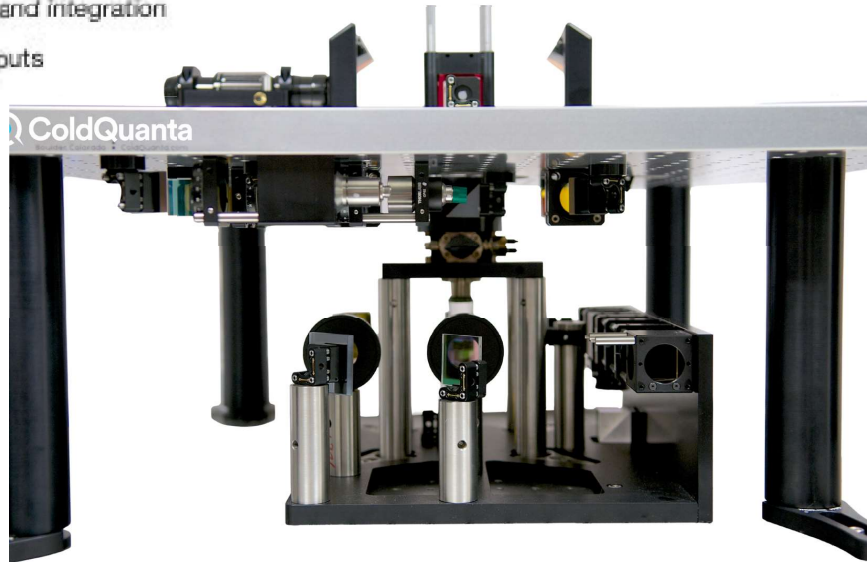


Physics Platform LASER COOLING OPTICS

Product

- Accessible layout for user applications
- Pre-aligned for rapid deployment
- Robust structure and integration
- FC/APC Fiber inputs



Product Description

The Physics Platform is a highly flexible complete opto-mechanical package to enable the production of cold and ultracold atom samples in a RuBECi or Double-MOT vacuum system. The platform consists of two stages: a 2D+ MOT for producing a two-dimensional (2D) magneto-optical trap (MOT) in the lower chamber; and a Six-Beam MOT Stage for creating a six-beam three-dimensional (3D) MOT in the science chamber. It also includes optics for optical pumping and imaging of cold and ultracold atoms in the science chamber. Like the Physics Station, the Physics Platform has excellent optical access, while the platform provides users with increased flexibility to modify and expand the optical system.

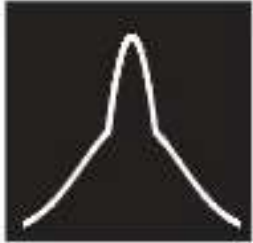
Product Specifications

Wavelength Options	767nm / 780nm / 852nm
Typical Laser Power Requirements	2D MOT: 40-70 mW. 3D MOT: 30-50 mW. (5-10% as Repump)
Optical Inputs	Optical Pumping: <1 mW. Imaging: <1 mW. 4x FC/APC fiber optic inputs
Beam Dimensions (1/e ²)	2D MOT: 15 x 22.5mm. 2D MOT+: 7.5mm. 3D MOT: 15.8mm Pumping: 7.5mm. Imaging: 11mm.
Imaging	Absorption Imaging System (Optional)
External Dimensions	61x61x35 cm (24x24x14 in.)

Related Products

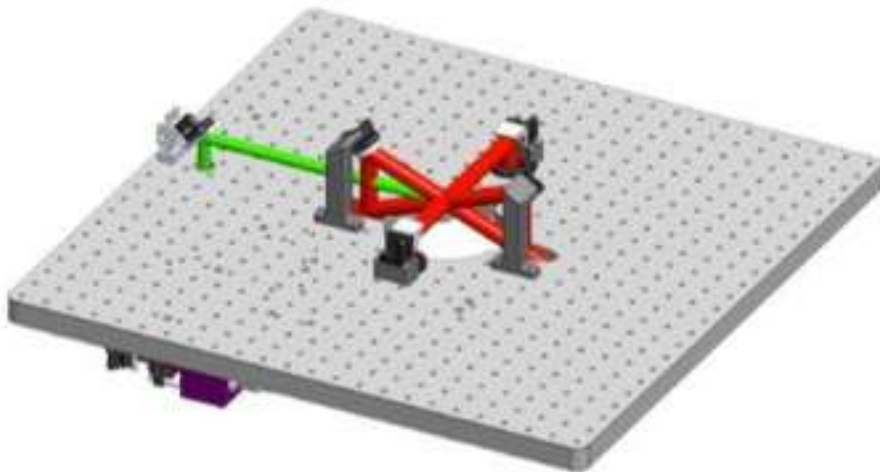
The Physics Platform is used in conjunction with:

Double MOT	CUD-F20U-XXX
RuBECi	CUR-F20U-XXX

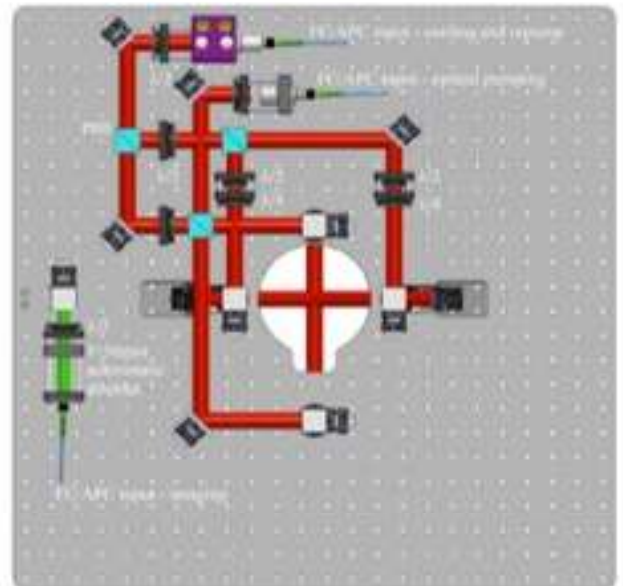


Physics Platform LASER COOLING OPTICS

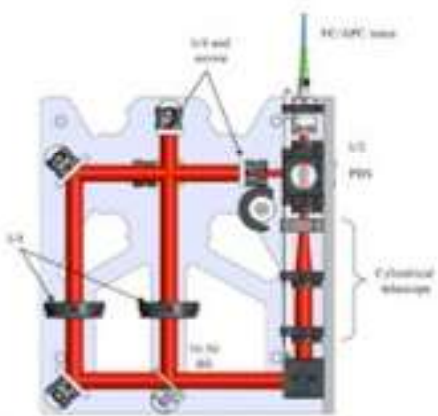
Product Configuration



Level 3: 3D MOT, Optical Pumping & Imaging Beam Delivery
Housing all beam preparation on the underside leaves plenty of space around the 3D MOT cell to mount user applications.



Level 2: 3D MOT, Optical Pumping & Imaging Beam Staging
Well engineered, multi-level system utilizes both surfaces of a single breadboard: Preparing and delivering the 6-beam MOT light, optical pumping beam and imaging beam.



Level 1: 2D(+) MOT Beam Delivery
Includes delivery of 2D MOT and push beams.