Quantum Cores 2D MOT Solutions

Adjustable Picas



PRODUCT HIGHLIGHTS

- Available in rubidium or cesium models
- Intended for use with Infleqtion CASC
- Viewing aperture for easy 2D MOT imaging
- Available with power monitoring photodiodes

The Infleqtion Picas is a compact, alignment-free beam delivery package. The Picas produces a 2D+ MOT beam configuration with three user-supplied fiber-coupled light inputs, capable of producing a cold atom flux of >109 atoms/second when used in conjunction with Infleqtion's CASC. The unit is easily integrated onto the CAMAPA coil assembly, allowing for a simple plug-and-play solution to create a 2D MOT. An optional photodiode configuration provides polarization cleaning and power monitoring capability for all three beams.





PRODUCT SPECIFICATIONS

Laser Input Requirements	 2x 20mW cooling and 0.4mW repumper for 2D MOT 	
	 1x 2mW cooling and 0.1mW repumper for push polarization aligned to fiber key (slow axis) 	
Optical Input	3x FC/APC fiber Inputs	
Typical Atom Flux	>10 ⁹ pre-cooled atoms per second	
Viewing Aperture	7 mm square viewing aperture	
Dimensions	101 mm x 130.70 mm x 113.40 mm 3.98 in x 5.15 in x 4.46 in	
Weight	1.9 kg (4.18 lbs)	

PRODUCT OPTIONS

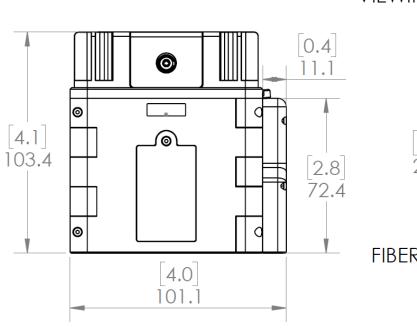
Adjustable PICAS Rb (photodiode)	CPP780AMIS
Adjustable PICAS Rb (no photodiode)	CPP780AM2S
Adjustable PICAS Cs (photodiode)	CPP852AMIS
Adjustable PICAS Cs (no photodiode)	CPP852AM2S

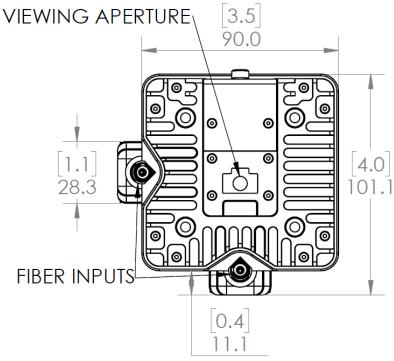
RELATED PRODUCTS

Cold Atom Source Cell (CASC)	CSFRXX
Adjustable Coils	САМАРА
Mounting plate for doubleMOT	CAAMPAD
Mounting plate for CASC	СААМРА

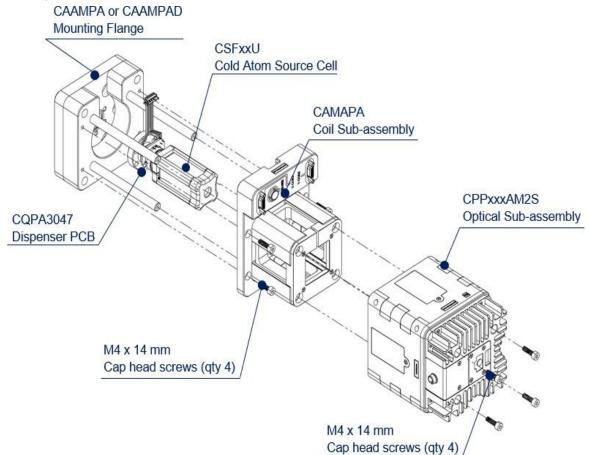
For more information, please contact sales@infleqtion.com

MECHANICAL DRAWINGS Measurements in mm and [inches]





Standard Configuration



UNCONTROLLED SALES DRAWING

For more information, please contact sales@infleqtion.com

