Quantum Cores 2D MOT Solutions

Fixed Picas

Infleqtion

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 CAMV2D magnet assembly, allowing for a simple plugand-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 keyed on fast axis of fiber 	
Optical Input	3x FC/APC fiber Inputs	
Typical Atom Flux	>10 ⁹ pre-cooled atoms per second	
Viewing Aperture	3 mm Ø viewing aperture	
Dimensions	67 mm x 67 mm x 112 mm	
	2.63 in x 2.63 in x 4.41 in	
Weight	0.25 kg	
Power Monitoring Photodiodes (Optional)	Polarization cleaning and power monitoring – 3x SMA connector	
DEL VIEU DOUDLICIE		

PRODUCT OPTIONS

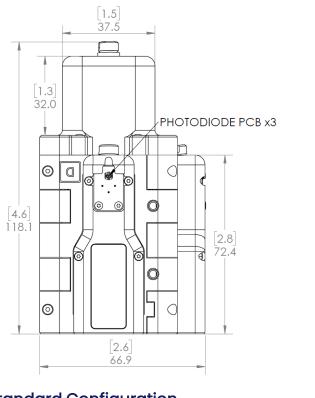
Fixed PICAS Rb (photodiode)	CPP780FM1S
Fixed PICAS Rb (no photodiode)	CPP780FM2S
Fixed PICAS Cs (photodiode)	CPP852FM1S
Fixed PICAS Cs (no photodiode)	CPP852FM2S

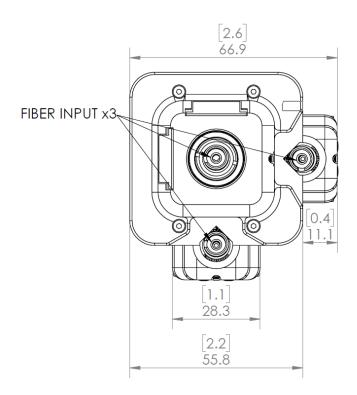
RELATED PRODUCTS

Cold Atom Source Cell (CASC)	CSFXX
Permanent Magnets	CAMV2D

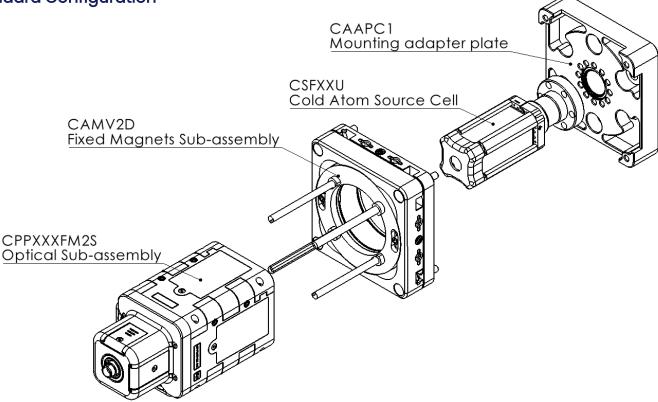
For more information, please contact sales@infleqtion.com

MECHANICAL DRAWINGS Measurements in mm and [inches]





Standard Configuration



UNCONTROLLED SALES DRAWINGS

For more information, please contact sales@infleqtion.com