

Coil PICAS

Photonically Integrated Cold Atom Source

Alignment-free 2D+ MOT Source

Compact opto-mechanics

Intended for use with Cold Atom Source Cell

Integrated heat sink

Available with Power Monitoring Photodiodes



CPPXXXAM25

Specifications

Minimum 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 fibre key (slow axis)

Optical Input

3x FC/APC fibre Inputs

Typical Atom Flux

$>10^9$ pre-cooled atoms per second

Mounting

Magnetic Coil Sub-Assembly and PICAS Coil Mount Assembly
mounting compatibility (see datasheets on Coil PICAS web page)

Viewing Aperture

7mm square viewing aperture

Dimensions

101 x 130.70 x 113.40 mm

Weight

1.3kg

Description

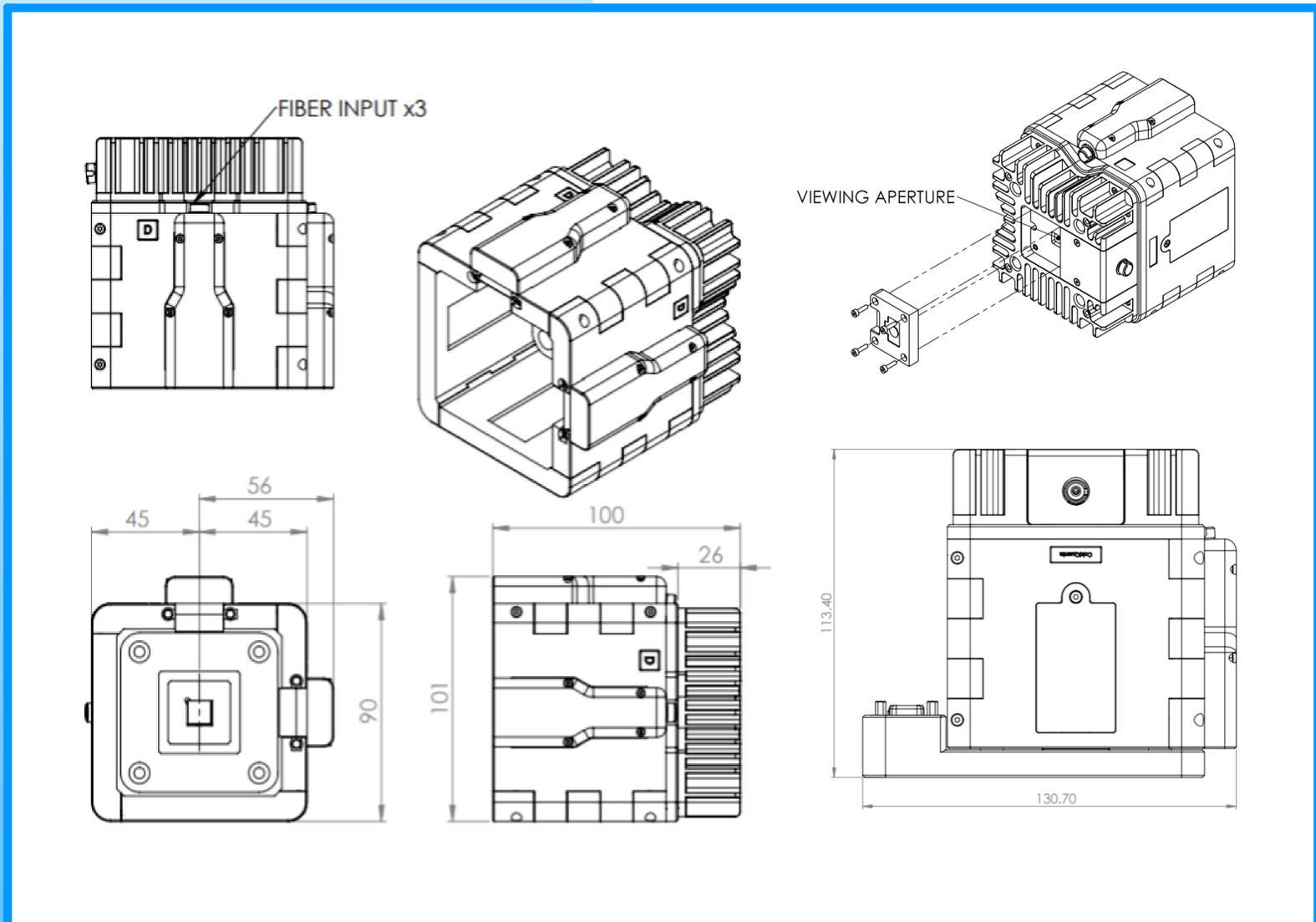
The ColdQuanta PICAS is a compact, alignment-free beam delivery package. It produces a 2D+ MOT beam configuration with three user-supplied fibre-coupled light inputs, capable of producing a cold atom flux of $>10^9$ atoms per second when used in conjunction with the ColdQuanta CASC (Cold Atom Source Cell). The unit is easily integrated into experimental setups, allowing for a simple plug-and-play optical package.

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Photonicly Integrated Cold Atom Source

Dimensions

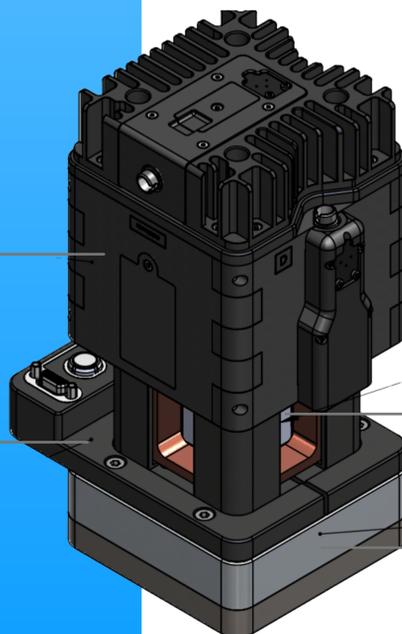
All dimensions shown in millimeters - mm. Not to scale



Accompanying Products

Optical Sub-Assembly
(CPXXXAM2S)

Coil Sub-Assembly
(CAMAPA)



Cold Atom Source Cell (CASC)
(Not Included)

Mount Assembly
(CAAMPA)(Not Included)