

# CVIP<sub>1</sub> – CRYOGENIC VIBRATION ISOLATOR PLATFORM 1



## Features

- 3 DoF vibration attenuation inside the cryostat
- Placed between cold plate and experiment
- High insensitivity to cables and thermal braids
- Compatible with JPE's CPSHR<sub>1</sub> stage
- High Q factor (no forced damping)
- Non-magnetic
- Large central open aperture

## Description / Applications

The CVIP<sub>1</sub> is part of the CVIP series, a general use passive vibration isolation platform that is placed directly on the cold plate and carries the experiment, thus reducing z, Rx and Ry vibrations into the experiment. For practicality and ease of use the cut-off frequency, above which vibrations are attenuated, is designed in the tens of Hertz range thereby accepting transmittance of the less critical low frequency vibrations but enabling a substantial payload and having reduced sensitivity for attached wiring.

## Specifications

General info	
Isolated axes	Z, Rx and Ry
Dimensions	See drawings below
Operational environmental conditions	20 mK to 375 K, ambient to UHV
Weight	0,15 kg
Frequencies and load capacity	
Payload	0,5 kg
Cut-off frequencies	Z: 42 Hz / Rx: 12 Hz / Ry 12 Hz (max payload, centered 35mm above platform)
Mechanical end stops	+/-0.5 mm
Materials	
Construction	Phosphor bronze



## CVIP<sub>2</sub> – CRYOGENIC VIBRATION ISOLATOR PLATFORM 2



### Features

- 3 DoF vibration attenuation inside the cryostat
- Placed between cold plate and experiment
- High insensitivity to cables and thermal braids
- Compatible with CPSHR<sub>2</sub> and CPSHR<sub>3</sub> stages
- High Q factor (no forced damping)
- Nonmagnetic
- Large central open aperture

### Description / Applications

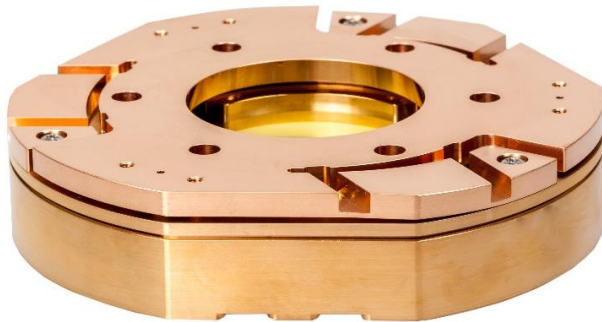
The CVIP<sub>2</sub> is part of the CVIP series, a general use passive vibration isolation platform that is placed directly on the cold plate and carries the experiment, thus reducing z, Rx and Ry vibrations into the experiment. For practicality and ease of use the cut-off frequency, above which vibrations are attenuated, is designed in the tens of Hertz range thereby accepting transmittance of the less critical low frequency vibrations but enabling a substantial payload and having reduced sensitivity for attached wiring.

### Specifications

General info	
Isolated axes	Z, Rx and Ry
Dimensions	See drawings below
Operational environmental conditions	20 mK to 375 K, ambient to UHV
Weight	0,7 kg
Frequencies and load capacity	
Payload	1,5 kg
Cut-off frequencies	Z: 32 Hz / Rx: 17 Hz / Ry 17 Hz (max payload, centered 35mm above platform)
Mechanical end stops	+/-0.5 mm
Materials	
Construction	Phosphor bronze



# CVIP<sub>3</sub> – CRYOGENIC VIBRATION ISOLATOR PLATFORM 3



## Features

- 3 DoF vibration attenuation inside the cryostat
- Placed between cold plate and experiment
- High insensitivity to cables and thermal braids
- High Q factor (no forced damping)
- Nonmagnetic
- Large central open aperture

## Description / Applications

The CVIP<sub>3</sub> is part of the CVIP series, a general use passive vibration isolation platform that is placed directly on the cold plate and carries the experiment, thus reducing z, Rx and Ry vibrations into the experiment. For practicality and ease of use the cut-off frequency, above which vibrations are attenuated, is designed in the tens of Hertz range thereby accepting transmittance of the less critical low frequency vibrations but enabling a substantial payload and having reduced sensitivity for attached wiring.

## Specifications

General info	
Isolated axes	Z, Rx and Ry
Dimensions	See drawings below
Operational environmental conditions	20 mK to 375 K, ambient to UHV
Weight	1,3 kg
Frequencies and load capacity	
Payload	6 kg
Cut-off frequencies	Z: 42 Hz / Rx: 30 Hz / Ry 30 Hz (max payload, centered 35mm above platform)
Mechanical end stops	+/-0.5 mm
Materials	
Construction	Phosphor bronze

