



FAQs: miniMOT V2

What atom species can be used with the miniMOT V2?

Rubidium and Cesium atoms.

Can other atom species be used?

The miniMOT has been designed to work with Rb and Cs atoms only. Future product releases may be designed around other atom species.

What type of magnet coils can be used with the miniMOT V2?

Infleqtion recommends using our standard miniMOT magnet assembly.

What is the diameter of coils in the MOT Coil magnet assembly?

The standard miniMOT V2 coils have a diameter of 58.6mm.

What type of Atomic Prism (UHV glass cell) can I use with the miniMOT V2?

2 cm Thin-Walled Cells

2 cm AR Coated Cells

High-NA Imaging Cells

Can the miniMOT V2 be configured with a custom UHV glass cell?

Yes. Custom UHV glass cells can be offered depending on the final specifications. Contact us at sales@infleqtion.com.



miniMOT V2

What is the distance between the MOT Coil magnets?

The spacing between the 2 coils is 58.9mm.

How many windings of the coils are in the MOT Coil product?

We do not provide details on the number of windings of our MOT Coil product.

What types of AR coating can be used with the UHV glass cell?

H-Coating

K-Coating

How do I know if the UHV glass cells are under vacuum?

Please consult the miniMOT V2 User Manual.

What is the material and gauge of the wire used in the MOT Coils?

We do not provide details on the materials and construction of our MOT Coil product.

How can I guide my laser light into the glass cell?

Infleqtion offers users a pre-aligned optics kit, <u>miniMOT Package</u>, to help users guide laser light into the glass cell.

What current setting should be used when I start the device?

A certificate of conformance is provided with the unit. The operating drive current at which fluorescence was observed is listed in this document. Please consult the Installation Guide in the product user manual for additional technical support.



miniMOT V2

The shock sticker on the delivery packaging was activated. What should I do?

Please consult the user manual for guidance on the steps that should be performed.

I have an original version of the miniMOT. Will this product continue to be supported?

The original miniMOT is obsolete and is no longer supported by Infleqtion. For more information, please contact us at sales@infleqtion.com.

Is the miniMOT V2 field serviceable?

Field service is not provided at this time. If there is a problem with the unit please consult the Troubleshooting Guide in the <u>user manual for additional technical support</u>.

Does the miniMOT Package require free-space or fiber-coupled light?

The miniMOT Package requires a FC/APC fiber input.

I'm unsure what the readings on the display mean?

Please consult the product user manual for additional technical support.

When will the USB and SMB ports be available?

Future versions of the product will be released with these features enabled. For more information, contact us at, sales@inflegtion.com.

What should I do if I have a problem with the product that I cannot solve using the product manual?

If you purchased the product directly from Infleqtion, please contact us at, <u>sales@infleqtion.com</u>. If you purchased the product from a distributor, please contact your sales representative.



miniMOT V2

What are the Terms and Conditions of the Sale?

<u>View the Terms of Sale</u>. This document also contains information on the product warranty.

What is the useful lifetime of the miniMOT V2?

If the product is used under normal operating conditions, e.g., specified drive current values, the miniMOT should last several years.

Are the atom dispensers replaceable?

The atom dispensers are not replaceable. If they are past their useful lifetime, which is typically several years, a new unit will be required. Please consult the product user manual for additional technical support.

Can the glass cell be baked out when attached to the miniMOT?

No. Due to the temperatures required for bake out (>300 C) the miniMOT unit would be damaged.

Can the dispensers be interchanged or repositioned in the miniMOT I purchased?

No. The dispensers are located in the optimal position for MOT creation.

All Infleqtion hardware, software, products, services as well as all included materials and data are governed by the Terms and Conditions of Sale and Service found at

https://www.infleqtion.com/standard-purchase-order-terms-and-conditions-1