

System Requirements

CrystalMaker is a modern 64-bit object-orientated application, designed to take full advantage of modern operating systems and multi-core hardware.



Native Applications

CrystalMaker is unique in being one of the very few—and perhaps the *only*—real native crystal structures application for Mac and Windows. This matters, since the alternative—lowest-common-denominator “cross platform” apps running via third-party compatibility layers such as *Qt*, *wxWidgets* or *Java*—have such woeful performance, design and usability issues.

By developing *proper* native Mac and Windows applications from scratch (using only the official development frameworks from Apple and Microsoft) we can guarantee optimum performance and the best-possible user experience.



Mac

CrystalMaker for Mac is a native Mac application, written in a combination of Objective-C and plain-C for ultimate performance. The user interface is crafted using Apple’s own “Cocoa” framework, managed via *Xcode*.

CrystalMaker is designed to take full advantage of recent Mac hardware and supports key Mac technologies including:-

- Apple Silicon
- Retina graphics
- Multi-touch (rotation and zooming)
- Haptic feedback (“feel your structure as you measure it”)
- Dark Mode
- Touch Bar interface (MacBook Pro)
- Full-screen mode and “Spaces”
- Quick-Look previews
- Finder thumbnails
- QuickTime video
- Code-signed, sandboxed, notarized application (to keep your Mac safe)

Operating System

To run CrystalMaker for Mac you will require MacOS X 10.14 “Mojave” through to 14.x “Sonoma”. We recommend using the very-latest operating system, as this includes many low-level bug fixes as well as support for the latest hardware.

Hardware Advice

CrystalMaker is a workstation-class application, so for best results your hardware should be commensurate with this:-

- If you have an *Intel*-based Mac, you will get the best performance out of a discrete video card.
- The newer *Apple Silicon* designs will give superior performance thanks to their faster memory architecture and embedded *Neural Engine*.



Windows

CrystalMaker for Windows is a native 64-bit program, written in C# and using Microsoft's .NET framework. It is designed for modern operating systems and features:-

- Microsoft installer
- Native Windows interface
- High-DPI graphics (e.g., Surface Pro)
- Multi-touch rotation and scaling (e.g., touch-sensitive displays)

Operating System

To run CrystalMaker for Windows you will require Windows 7 (Service Pack 1), Windows 8, Windows 10 or 11 (recommended). You will also need to ensure your computer includes the .NET framework 4.6 or later, and supports *OpenGL* 3.3 or later.

Hardware Advice

As with the Mac version, CrystalMaker for Windows is a workstation-class application, so will not run optimally on “office basics” hardware.

- You will get the best performance out of a discrete video card.
- If you have an *nVidia* graphics card, you may need to explicitly *enable* full graphics acceleration for CrystalMaker (and any other *OpenGL* apps).

Please Update Your Graphics Card Drivers!

CrystalMaker for Windows features very-high performance 3D graphics which are designed to take full advantage of the advanced video acceleration capabilities of modern graphics cards. It is imperative that you update your graphics card driver to ensure full compatibility!

Please note that your graphics card drivers will NOT be automatically updated as part of the standard Windows update mechanism, as they are from third parties, not Microsoft. Please visit your graphics card vendor's website to download and install the latest drivers.