GDSLAB Software - Customer PC Requirements

	Minimum	**Recommended**
OS (64-bit)	Windows 10	Windows 10/11
CPU/Processor	Intel i3 or AMD Ryzen 3	Intel i7 or AMD Ryzen 7
GPU/Graphics	At least 256MB of VRAM - DirectX 9c capable)	nVidia GeForce GTX 1070 or later or equivalent AMD Radeon GPU with at least 2GB of VRAM - DirectX 11 capable
Screen Resolution	1080p (1920x1080)	1080p (1920x1080)
Memory RAM	8GB	16GB
Available Disk Storage	256GB HDD	512GB SSD
USB Ports	USB v2.0 or above	USB v2.0 or above

Minimum system requirements are the minimum hardware and software needed to run a program without the risk of errors, however you might experience slow performance, longer loading times, and reduced features. Recommended system requirements are the specifications for an optimal user experience:

	Minimum system requirements	**Recommended system requirements**
Purpose	Run the software, but not necessarily an optimal user experience	Ensure the software runs smoothly and effectively
What it specifies	The least powerful setup that can run the software without risk of errors	The hardware and software setup that provides a good user experience

Recommended system requirements are usually much higher than minimum requirements and are generally considered a better guideline for a fully usable and enjoyable experience.

Software may run on a lower-spec system than listed, but with reduced performance or functionality and with a risk of crashing.

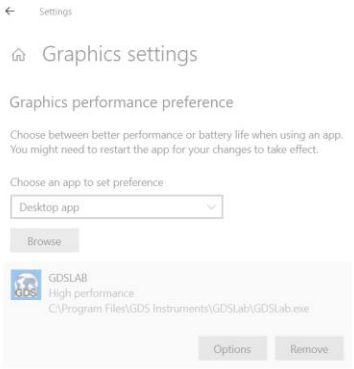
Types of Computer:

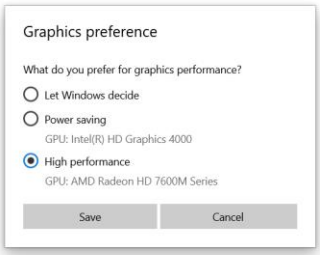
Desktop PC (Tower or Small Form Factor) 	This PC format with the recommended requirements is ideal, it is the most cost effective and easy to upgrade components. The cases have good active cooling and it's easy to upgrade graphics card and other components. *With the small form factor beware of the availability of less graphics card options*
Laptop 	A laptop with the recommended requirements and a dedicated graphics card, not just using the onboard graphics chipset (which typically does not meet the minimum VRAM specification for GDSLAB 2024) is ideal. Typically it is not possible to upgrade the graphics card of a laptop. When running a laptop with a dedicated graphics card it is advised to ensure that GDLAB is set to use the dedicated graphics card in the Windows Settings (explained below).
Mini/Micro PC 	This format is not recommended. They often come with the most basic onboard graphics chipset which do not meet the minimum VRAM specification for GDSLAB 2024 and there is no option to upgrade components. Many also suffer with cooling issues as in most cases there is no active cooling fan. Have been found to be problematic.

Selecting the Recommended Graphics Card for GDSLAB Software

To ensure that GDSLAB is using the most appropriate graphics hardware if more than one option is available on the PC or laptop.

In Windows Settings go to System then Display and then Graphics Settings. Use Browse to select the location of GDSLAB.exe (C:\Program Files\GDS Instruments\GDSLab\GDSLab.exe) and then ensure it is set to High Performance and that the dedicated Graphics card is selected if there is one available (see screenshot below)





Running GDSLAB Software on a PC Below Minimum Specification

GDSLAB Software has been run successfully on many desktop computers and laptops that do not meet the minimum specifications (typically the graphics requirements), but in some cases running a computer that does not meet the minimum graphics requirements has resulted in periodic software shut-downs. This is the result of a crash in the graphics UI rendering in the core Windows .NET drivers.

In this case a work-around has been implemented which has solved this problem on those computers and has allowed GDSLAB to continue to be used successfully (see Troubleshooting), however this does result in a small delay in the responsiveness of the UI and when switching graph parameters and test stages.

Troubleshooting

If running a PC below the minimum specification for GDSLAB Software you may encounter problems running the software (software shutting down unexpectedly), in which case refer to the Helpsheet on turning off Hardware Acceleration in GDSLAB.