# The kpoints.in input file

From GPUMD
Jump to navigationJump to search

## Contents

## Purpose

This file is used to specify the k points needed for `src/phonon`.

## File format

- The format of this file must be as follows:

```
N_kpoints
kx(0) ky(0) kz(0)
kx(1) ky(1) kz(1)
...
kx(N_kpoints-1) ky(N_kpoints-1) kz(N_kpoints-1)
```

- Here,
    - `N_kpoints` is the number of k points you want to consider.
    - The remaining lines give the k vectors (in units of 1/A) you want to consider.

## Tips

- The user has to make sure that the k vectors are defined in the reciprocal space with respect to the unit cell chosen in the basis.in file.

## Related pages

- See the tutorial on phonon dispersion for an explicit example.

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- This page was last edited on 6 June 2019, at 21:32.