



## Axial Fan Ø120mm LEGO Technic compatible



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### Summary

A Ø120 mm axial fan that fits LEGO Technic axles.



2.68 hrs



1 pcs



0.15 mm



0.40 mm



PET



17 g



Prusa  
MK3/S/S+

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I've always wanted to design a nice fan, similar to the cooling fans that computers have. This turned out quite good in terms of both looks and performance. I was surprised that it was easier than I thought to get the right look. In terms of performance to sound though, it probably don't match up to real Noctua fans... 😊

I made the interface in the hub to fit LEGO Technic axles, since LEGO Technic is easy to work with and making gearboxes. It's quite effective at pushing air quietly, and very effective catching air to make something spin! A simple hand cranked gearbox with handle I made has 1:27 gear ratio (1:3 x 1:3 x 1:3), and it works great.

It's not the easiest to print without support though, but with good cooling and moderate speed the fan blades come around pretty good. The attached .3mf-file have good settings for a Prusa i3MK3S.

I've printed mine in PETG since the fan blades are delicate, the thickness is 0,6 mm. PETG allows for a little flex and don't break if the fan is dropped. In PLA the fan blades should come out nicer, but you'll have a brittle fan that breaks easily.

If you want the fan spinning the other direction just mirror it in the slicer!

Please let me know if you're having trouble fitting LEGO axles! I've adjusted the hub a few times now and it's a really tight tolerance. 😊

## Model files

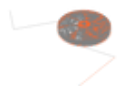


**axial\_fan\_01.3mf**



**axial\_fan\_01.stl**

## Print files



**axial\_fan\_01\_015mm\_petg\_mk3s\_2h41m.gcode**

PET 0.40 mm 0.15 mm 2.68 hrs 17 g Prusa MK3/S/S+

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