



18650 Cell Holders for DIY Battery Packs - Lightweight, Durable, and Easy to Print



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Summary

The 18650 cell holder is a 3D-printable component designed for securely holding 18650 lithium-ion cells.

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Summary:

The 18650 cell holder is a 3D-printable component designed for securely holding 18650 lithium-ion cells. It combines a lightweight structure with high durability, making it perfect for DIY battery packs, electronics projects, and other custom battery solutions. This design ensures a stable and reliable mount for your cells while maintaining an optimal weight-to-strength ratio.

Unlike traditional holders, this design offers simplicity in printing and assembly, while ensuring excellent strength and reliability. The holders are easy to print and assemble, and the result is a professional, clean, and functional component for your battery needs.

Key Features:

- **Lightweight and Durable:** Designed for strength and stability, ensuring

your 18650 cells are securely held without adding unnecessary weight.

- **Optimal Fit:** Precisely engineered for standard 18650 cells, making it a great choice for various battery pack configurations.
- **Easy to Print:** The STL files are optimized for easy printing with standard 0.2 mm layer height, providing good resolution without increasing print time.
- **Infill Recommendation:** Use 25% cubic infill for an excellent balance between material use and strength.
- **No Complex Assembly:** The holder components are designed for straightforward assembly, requiring no special skills.

Printing Settings:

- **Quality:** 0.2 mm (Standard Quality)
- **Infill:** 25% Cubic
- **Material Recommendations:** PLA or PLA+ for optimal strength, durability, and ease of printing.
- **Print Speed:** 120 mm/s or higher (depending on your 3D printer capabilities)
- **Print Temperature:** 200-220°C (depending on the filament type)

Assembly:

Assembly is quick and straightforward. After printing the parts, simply insert the 18650 cells into the holders and ensure they fit securely. The design is optimized for a clean and easy fit. Make sure to print each part separately (Holders, Cells, and Accessories) and follow the instructions for proper orientation during printing.

Applications:

- DIY battery packs for personal projects
- Custom battery enclosures for electronics
- Model-building and robotics projects requiring 18650 cells

Notes:

- PLA and PLA+ are recommended for their excellent durability, printability, and environmental safety.
- Be cautious when handling lithium-ion cells to ensure safety during assembly and usage.
- This holder is designed to accommodate multiple 18650 cells, but ensure you follow correct safety practices when assembling larger battery packs.

Download the STL files and start building your own battery solutions with this reliable and lightweight 18650 cell holder!

Model files



2x1.stl



2x2.stl



2x3.stl



2x4.stl



2x5.stl



2x6.stl



3x1.stl



3x3.stl



4x1.stl



4x4.stl



2x1.sldprt



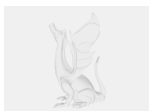
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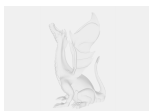
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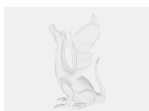
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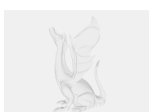
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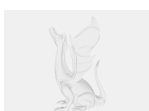
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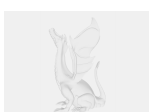
3x1.sldprt



3x3.sldprt



4x1.sldprt



4x4.sldprt

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