

As a leader in busbar design and manufacturing, Storm Power Components continually gets a wide range of questions on key issues regarding busbars. - including this one.

Why integrate components into busbars?

Storm Power Components builds a variety of different busbars, single conductor, multi conductor, long, very short. Many of these go into cabinets and they interface with a number of different components. Typically in an electrical system you have filters, chokes, circuit breakers, breakable breakers or other components that interface to busbars in a Power Distribution System (PDS). At Storm, we also provide value-added services by adding components to the busbar itself to create a complete out-of-the-box PDS.

Benefits of integrating components on to busbars include:

- **Space Savings:** Compact Design: Integrating components on busbars reduces the overall footprint of the system, allowing for more efficient use of available space.
- **Reduced Wiring Complexity:** Fewer wires are needed when components are directly integrated, leading to less clutter and easier assembly.
- Improved Reliability: Fewer connections reduce potential failure points, enhancing overall system reliability and performance.
- Enhanced Thermal Management: Busbars can effectively dissipate heat from integrated components, improving thermal management and extending the lifespan of electronic devices.
- Lower Installation Costs: Integrating components can reduce assembly time and labor costs, leading to more efficient production processes.
- **Better Electrical Performance:** Shorter connection paths between components can decrease inductance and resistance, improving electrical performance.
- Easier Maintenance and Upgrades: Modular integrated designs can facilitate easier maintenance and upgrades, as components can be accessed or replaced without extensive rewiring
- Improved System Integration: Integrated components allow for better synergy between devices, leading to improved functionality and performance.
- Weight Reduction: Integrating components into busbars can result in lighter assemblies compared to traditional wiring harnesses.



For more information on adding components to busbars, Contact Storm Power Here.