



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.

What Certifications are needed for Aerospace & Defense?

Aerospace and Defense applications are some of the most challenging deployments that electronic systems can face. Some of the specific areas of concern include:

- **Temperature Extremes:** Equipment must operate in extreme temperatures, ranging from very low (e.g., in space or high-altitude flight) to very high (e.g., during re-entry or in hot climates).
- **Humidity and Moisture:** High humidity can lead to corrosion, while exposure to moisture in various forms (rain, snow, fog) can impact system performance.
- **Vibration and Shock:** Systems are subject to high levels of vibration and shock from takeoff, landing, and combat situations, requiring robust design to withstand these forces.
- **Electromagnetic Interference (EMI):** Systems must be shielded against EMI from various sources, which can affect communications and sensor performance.
- **Dust and Contaminants:** Operating in environments with dust, sand, or other particulates can lead to wear and failure of mechanical components and sensors.
- **Altitude Pressure Changes:** Aerospace systems, particularly those operating at high altitudes, must be designed to handle rapid pressure changes and low oxygen levels.
- **Radiation:** Systems deployed in space or at high altitudes are exposed to increased levels of cosmic radiation, which can affect electronic components.
- **Combat Conditions:** In defense applications, systems may operate in hostile environments where they are exposed to enemy fire, requiring armor and advanced protective measures.

For busbar manufacturing in the aerospace and defense industries, certifications include:

- **AS9100** - This is the aerospace standard for quality management systems, which is based on ISO 9001 but includes additional requirements specific to aerospace
- **NADCAP** - The National Aerospace and Defense Contractors Accreditation Program provides accreditation for special processes used in the aerospace industry, ensuring compliance with industry standards.
- **ITAR (International Traffic in Arms Regulations)** - This certification is necessary if the busbars are involved in the manufacture or sale of defense items listed on the United States Munitions List.
- **ISO 9001** - While AS9100 includes ISO 9001 requirements, some manufacturers may also seek ISO 9001 certification for broader market acceptance and quality management.
- **Customer-specific requirements** - Aerospace and defense customers may also have specific additional requirements or certifications they expect from suppliers.



Storm Power's dual-certified Quality Management System meets the ISO 9001:2015 requirements and the even stricter AS9100:D standards, as required by the Aerospace industry and the Department of Defense. This proven level of process control, with integrated layered quality gates, provides confidence that our products are manufactured the same way, every time, within specifications.

[For more information on busbars for aerospace & defense, Contact Storm Power Here.](#)