

# Specialty Environmental Control Systems For Mission Critical Applications.. Worldwide



MILITARY

AEROSPACE

SECURITY SCREENING

***Unique challenges require specialized solutions.*** When your unique challenge is mission-critical, you need a partner with both precision, scope, and real solutions. Whether your vital application calls for precise temperature and humidity tolerances with cleanroom level filtration or if your application requires a broad range of capabilities in harsh conditions, ***we can design a solution to achieve your goals and to neutralize risk.***

## Our environmental control system (ECU) capabilities include:

- Temperature control tolerances to +/- 0.01°C
- Relative humidity control tolerances to +/-0.5%
- Direct expansion, chilled water or thermoelectric capabilities
- HEPA, ULPA or molecular filtration
- Pressure control
- Fractional tonnage to 25+ ton cooling capabilities
- Enclosures from bench-top to room sized
- Dehumidification /Ultrasonic or steam humidification
- Self-contained or remote operation
- Severe duty- ruggedization
- Built to withstand extremes in temperature & humidity
- Operation in salt air, blowing sand and other harsh environments
- UV air sterilization

Concept Development · Engineering · Testing · Manufacturing · Global Expertise

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# Specialty Environmental Control Systems – Worldwide

Since 1986 Air Innovations has been the leader in HVAC and environmental control solutions for end users and original equipment manufacturers around the world. Our systems are custom configurations for compact spaces, with close tolerance control of temperature, humidity and filtration where we can contribute in a meaningful way to the success of your mission-critical business.

## Here are some examples of Air Innovations' products from its military portfolio:

### UNMANNED VEHICLE

For a defense contractor that produces computer workstations used in portable avionic applications, air Innovations designed, tested, prototyped and built an ECU to mil-spec requirements, within a package that was restricted to the most stringent weight and size limitations. These workstations are exposed to extreme temperature and humidity ranges during deployment in harsh climates around the world; our ECU conditions those extremes to a consistent air quality, ensuring proper performance of the workstations.



### SECURITY SCREENING

A manufacturer of automated baggage handling explosion detection equipment used in airports around the world by the U.S. Transportation Safety Administration chose Air Innovations to create this powerful, compact air conditioning unit. The unit operates in both the extreme hot and cold temperatures found in unconditioned baggage areas and functions in all international electrical voltage modes.



### AEROSPACE

Air Innovations creates environmental control systems that control cleanroom conditions of spacecraft bays located in salt air environments. Our systems are modular with redundant temperature controls as well as controls for precisely maintaining humidity, dewpoint and airflow conditions.



### AEROSPACE

Designed specifically to operate under harsh climate conditions, this Air Innovations system provides cleanroom-quality air to sensitive components inside Boeing 747s that fly military sorties, during routing calibration of their laser guided missile systems. Air Innovations' solution included cooling, heating, humidification, HEPA filtration, high static blowers, and all the necessary controls. It is Air Innovations largest unit built on wheels.

