

# MOBILE CLEANROOM PROGRAM

## MOBILE CLEANROOM AND MAINTENANCE SYSTEM



**MISSION //** The U.S. Army's Rapid Capabilities and Critical Technologies Office (RCCTO) oversees two key Directed Energy (DE) programs: the Palletized High Energy Laser (PHEL), and the Army Multi-Purpose High Energy Laser (AMP-HEL). Critical maintenance for the PHEL system must be performed in an ISO 14644 Class 5 cleanroom; however, access to a cleanroom of that level is limited or non-existent in overseas areas of operation. The challenge of providing rapid cleanroom availability drove the search for a mobile option.

**SOLUTION //** Nomad GCS partnered with BlueHalo to design, manufacture, and integrate a containerized Mobile Cleanroom and Maintenance system that is ISO 14644 Class 5 cleanroom capable and C-130 transportable. The system consists of two 20-foot ISO 668 compliant containers. The Mobile Cleanroom container has an ISO Class 5 laminar downdraft system and features a 4-foot collapsible roof extension to accommodate the tallest PHEL system while maintaining C-130 clearances. This container also features cleanroom particle sensors that provide real-time particle counts via Nomad Total Command™ (NTC), a collapsible workbench, and clean air dryer. The Mobile Support container houses two workstations for maintenance management, a data rack, additional storage for spare parts, and a NeverDown™ power management system that provides 30 minutes of backup power. Both containers have dual-redundant HVAC systems and can operate independently, or as a paired system with power and data interconnects.

**Delivery Date:**  
Mar 3, 2025



### FEATURES //

- 20' Purpose-Built ISO Containers
- Nomad Total Command™ (NTC) Asset Automation + Control
- Real-Time Cleanroom Particle Tracking via NTC
- NeverDown™ Power Management System
- 2 Workstations with Data Rack and I/O Panel Interconnects
- Collapsible 4' Roof Extension in Mobile Cleanroom
- Laminar Downdraft System with 8 Class 5 Filter Fan Units
- Ruggedized, Dual-Redundant HVAC Systems