SECTION 1: Scope of Requirement
The Department of War has a requirement for an on-site, fully automated Liquid Nitrogen (LN2) Generator. The system must meet or exceed the technical and functional capabilities of the Rutherford & Titan - Titan 10 L/Day Liquid Nitrogen Generator (Brand Name or Equal).

SECTION 2: Salient Characteristics (Brand Name or Equal)
To be considered technically acceptable, any proposed "or equal" system must meet or exceed the following objective performance and physical parameters:

Characteristic	Requirement / Minimum Specification
Production Capacity	Not to exceed 10 Liters per Day (L/Day).
Integrated Storage Capacity	Not to exceed 55 Liters (55L) internal storage tank.
Nitrogen Purity	Greater than 99% pure liquid nitrogen.
Physical Dimensions	Maximum footprint of 63" H × 25" D × 36" W to fit existing spatial constraints.
System Weight	Maximum of 450 lbs.
Mobility	Must be integrated with heavy-duty rollers/casters for on-site mobility.
Cooling Method	Air-cooled system (no external water-cooling infrastructure required).
Power Requirements	Must operate standard electrical configurations: 120V, 60Hz, maximum draw of 20 Amps.
Power Consumption	Energy efficient; maximum of 2.2 kW/H during active production.
Acoustic Signature	Maximum noise level of 60–65 dBA at a distance of 2 feet.
Environmental Tolerance	Must be capable of continuous, automated operation in high ambient temperatures up to +125°F (+51.6°C).

SECTION 3: Key Functional & Smart Features
Any proposed "or equal" system must possess equivalent automated capabilities as described below:

Feature	Performance and Functional Standards
Automated Operation	"Plug-and-play" capability; fully automated startup/shutdown cycles requiring only power connection and a single manual/digital "start" input.

Intelligent Production Control	Must feature an integrated, intelligent control system (equivalent to *FlowSync™ Technology*) that continuously monitors internal LN_2 levels to automatically adjust, start, and stop production based on usage and capacity.
Remote Monitoring & Diagnostics	Must include built-in remote access capability (via Wi-Fi or Ethernet) to allow real-time system monitoring, troubleshooting, and diagnostics (equivalent to *SmartConnect™ Monitoring*).
Security Standards	Any wireless/wired connectivity must be compliant with standard federal networks or capable of being completely disabled/isolated based on local security protocols.