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NAICS Codes: Available Upon Request

Certifications: FCC / NIST 30+ years in Laboratory and cryogenic equipment service & Metrology

DEPLOYMENT EXAMPLES

- IVF, fertility, and tissue tank monitoring with LN₂ loss prevention
- Cryogenic sample protection in biotech, pharma, and clinical research labs
- Critical and pharmaceutical cold storage validation
- Academic R&D lab monitoring across diverse equipment types
- Industrial gas tank integrity assurance
- Integration with SCADA and lab monitoring systems
- In-transit data logging for cryogenic shipments.

LABOR & EFFICIENCY SAVINGS FOR LAB OPERATIONS

DeTech's system eliminates the need for manual dip-stick level checks, replacing labor-intensive tasks with automated, continuous monitoring. This not only reduces the risk of human error but also saves hours of technician time each week—especially in multi-tank facilities. By digitizing and automating validation, labs and facilities can reallocate skilled personnel to higher-value tasks, lower compliance overhead, and achieve significant cost savings in labor and operations.

CRYOCAPTURE™ VALIDATION DECK GAME CHANGING SOLUTION

For over 40 years, liquid nitrogen tank validation has been a manual, multi-device, and time-consuming process. DeTech has redefined the standard. The **CryoCapture™ Validation Deck** is the industry's first all-in-one platform for validating LN₂ tank levels and integrity using a single, NIST-calibrated device—shipped ready to deploy and operational within minutes. Unlike traditional methods requiring multiple tools and heavy labor, the **CryoCapture™ Validation Deck** delivers fast, automated results with no upfront cost. Clients can validate unlimited tanks within a 30-day rental window, with easy day-to-day extensions available. Generate audit-ready reports, ensure compliance, and uphold the highest quality standards—all from one compact, cost-effective system.

CryoCapture™ is more than a device—it's a breakthrough in cryogenic asset assurance and industry compliance efficiency.

BEYOND COMPARISON. BUILT TO LEAD

Other systems aren't just behind — they're structurally excluded. Our patented architecture defines a category only DeTech can operate in. Competitors lack the configurability, real-time intelligence, and traceability our platform delivers. Every new patent widens the performance gap, making imitation impossible.

COMPANY OVERVIEW

DeTech is a technology-driven leader specializing in liquid nitrogen (LN₂) tank asset protection. Our patented monitoring technologies are engineered to protect irreplaceable cryogenic samples and deliver unmatched operational visibility. We serve IVF clinics, biotech companies, pharmaceutical labs, and academic research institutions with precision solutions that ensure compliance, prevent catastrophic losses, and simplify audits.

Patents

With two granted U.S. **patents (US 11,092,509 B1 and US 12,170,012 B2)**, DeTech delivers breakthrough innovations in cryogenic validation—including our patented method for analyzing external tank temperature against ambient room temperature to detect vacuum failure and weight-based insights that calculate true LN₂ volume in liters. These capabilities enable early warning of system degradation and provide real-time visibility into tank health with every single reading.

CORE CAPABILITIES

CryoCapture™

DeTech's patented, modular hardware platform delivers intelligent, automated asset awareness across key tank and lab equipment parameters:

- External tank temp vs. room temp & RH% (patented vacuum breach detection)
- Internal tank temperature
- Weight-based liquid level monitoring, auto-converted to liters
- User-defined maximum fill level monitoring – see real-time fill levels during refills and prevent overfilling that can compromise tank longevity due to thermal shock
- Liquid loss rate calculated over any selected time interval
- In transit cold chain ready

DIFFERENTIATORS

- **Vacuum Detection (Patented):** External vs. room temp reveals insulation loss early
- **Weight-to-Liters:** Accurate LN₂ volume, loss rate insight
- **Plug-and-Play:** Fast setup, no IT needed, with standalone cellular option
- **Lid Status:** Industry-first lid monitoring date & time stamped
- **Unified Dashboard:** All data in one view, enterprise-ready
- **Risk Prevention:** Proactive, not reactive—detects issues before failure
- **Fits Any Tank:** Any size, any brand—even multi-ton units & caster bases
- **Multi-Monitoring:** CO₂%, O₂%, VOC, fridges, freezers, alarms, and more
- **Legacy-Proof:** Free upgrades & repairs during contract
- **NIST Certified:** Included at onboarding, no extra cost
- **100% Wireless Option:** No cables to the wall
- **Third-Party Integration:** Custom APIs available
- **Cloud Network:** Communication loss protection
- **Network Redundancy:** Cellular backup built in.
- **Onboard Storage:** Data retained for up to 72 hours per device.