

# **COMPLIANCE CERTIFICATION**

## **COMPLIANCE CERTIFICATION**

### **LOW TEMPERATURE OPERATIONS**

**CERTIFICATION DATE:** January 11, 2024

**COMPANY:** Polar Dynamics Robotics, Inc.

**JURISDICTION:** Delaware

**REFERENCE:** LTO-2024-001

#### **1. CERTIFICATION PURPOSE**

1. This Compliance Certification ("Certification") documents Polar Dyn

## **2. SCOPE OF CERTIFICATION**

1. This Certification covers all Company autonomous mobile robots ("a)  
a) BlueCore(TM) navigation system components  
b) Cold-environment power systems  
c) Reinforced chassis assemblies  
d) Temperature-hardened sensor arrays  
e) Environmental monitoring systems

## **3. APPLICABLE STANDARDS**

1. The Company hereby certifies compliance with:

- a) ANSI/RIA R15.06-2012 Industrial Robots Safety Requirements
- b) ISO 10218-1:2011 Robots and robotic devices
- c) IEC 60204-1 Safety of machinery - Electrical equipment
- d) NFPA 70E Standard for Electrical Safety in the Workplace
- e) FDA 21 CFR Part 110 Current Good Manufacturing Practice
- f) OSHA 29 CFR 1910.178 Powered Industrial Trucks

## **4. OPERATIONAL PARAMETERS**

1. The Company certifies that its AMR systems maintain operational i

- a) Minimum operating temperature: -30 C (-22 F)
- b) Maximum operating temperature: +45 C (+113 F)
- c) Temperature change tolerance: 15 C per hour

d) Humidity range: 10% to 95% non-condensing

e) Ice/frost accumulation resistance: Up to 2mm surface accumulation

## **5. TESTING AND VALIDATION**

1. The Company maintains comprehensive testing protocols including

a) Environmental chamber testing at certified facilities

b) Continuous 168-hour cold soak validation

c) Thermal cycling endurance testing

d) Power system performance verification

e) Navigation accuracy validation in cold conditions

f) Safety system functionality testing

2. All test results are documented and maintained for a minimum of six months

## **6. QUALITY MANAGEMENT**

1. The Company maintains ISO 9001:2015 certification for quality management
2. Regular audits are conducted by:
  - a) Internal quality assurance team
  - b) Third-party certification bodies
  - c) Customer compliance teams
  - d) Regulatory authorities as required

## **7. MAINTENANCE AND MONITORING**

1. The Company implements continuous monitoring of:

a) Real-time temperature sensors

b) System performance metrics

c) Safety system status

d) Component wear indicators

e) Environmental conditions

2. Preventive maintenance is performed according to documented schedules

a) Operating hours

b) Environmental exposure

c) Component lifecycle requirements

d) Customer specifications

## **8. REPRESENTATIONS AND WARRANTIES**

1. The Company represents and warrants that:

- a) All information provided in this Certification is true and accurate
- b) Testing data is maintained and available for audit
- c) Compliance monitoring is continuous and documented
- d) Any material changes will be promptly reported
- e) Required insurance coverage is maintained

## **9. CERTIFICATION PERIOD**

- 1. This Certification is valid for one (1) year from the Certification Date
- 2. Renewal requires full compliance review and updated testing validation

## **10. AUTHORIZATION**

The undersigned, being duly authorized, hereby certifies the accuracy  
foregoing on behalf of the Company:

POLAR DYNAMICS ROBOTICS, INC.

**By:**

Name: Dr. Elena Frost

Title: Chief Executive Officer

Date: January 11, 2024

**By:**

Name: Dr. James Barrett

Title: Chief Robotics Officer

Date: January 11, 2024



## 11. NOTARIZATION

State of Delaware

County of New Castle

Subscribed and sworn to before me this 11th day of January, 2024

—

Notary Public

**My Commission Expires:**

[NOTARY SEAL]

