NAVIFLOOR SENSOR ARRAY INTEGRATION SPECIFICATIONS

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Classification: Confidential & Proprietary

1. INTRODUCTION

1 This Integration Specification Document ("Specification") sets forth

2 This Specification is a controlled document subject to the Company
2. DEFINITIONS
1 "Sensor Array" means the proprietary configuration of pressure-sen
2 "Integration Points" means the designated connection interfaces be
3 "System Architecture" means the complete hardware and software
3. TECHNICAL SPECIFICATIONS
1 Sensor Configuration
- Pressure sensor density: 64 sensors per square meter

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Capacitive sensor overlay: 32 channels per square meter

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Minimum detection threshold: 0.1 N/cm

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Maximum load capacity: 2500 kg/m

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Sampling rate: 1000 Hz

2 Data Processing Requirements

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Local processing unit: NaviCore(TM) v4.0 or later

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Minimum RAM allocation: 8GB dedicated

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Storagegrequirement: 500GB SSD (industrial grade)

Network interface: Gigabit Ethernet with redundancy

3 Environmental Parameters

Operating temperature range: -10 C to 45 C

Humidity tolerance: 10% to 90% non-condensing

IP67 rated enclosure for processing units

EMI/RFI shielding compliant with IEC 61000-4-3

4. INTEGRATION PROTOCOLS

1 Physiqal Integration

Substrate layer thickness: 4.5mm 0.2mm

Power requirements: 24V DC, 2.5A maximum draw

Grounding requirements: Dedicated earth ground connection

Cable specifications: Shielded CAT6A or higher

2 Software Integration

API version compatibility: NaviFloor(TM) API v3.2.x

Protocol support: TCP/IP, MQTT, OPC-UA

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Authentication: OAuth 2.0 with HMAC-SHA256

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Data encryption: AES-256-GCM

5. QUALITY ASSURANCE REQUIREMENTS

1 Testing Requirements

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Factory acceptance testing (FAT) per ISO/IEC 17025

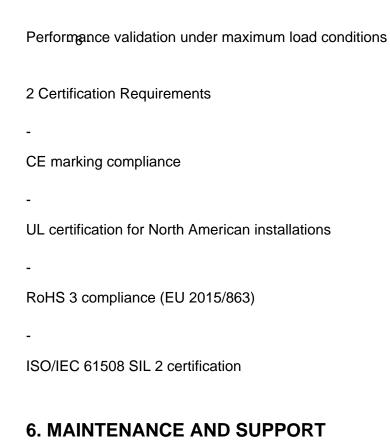
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Site acceptance testing (SAT) protocols

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Calibration verification every 2000 operating hours

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1 Preventive Maintenance

- 7 Quarterly sensor calibration verification
Bi-annual firmware updates
Annual physical inspection of substrate integrity
Monthly diagnostic data analysis
2 Technical Support
24/7 remote monitoring capability

4-hour response time for critical issues

Dedicated technical support contact
Regular system health reports
7. INTELLECTUAL PROPERTY AND CONFIDENTIA
1 All specifications, designs, and implementation details contained he
2 Recipients of this document agree to maintain its confidentiality and
8. DOCUMENT CONTROL
1 Revision History
v3.1: January 15, 2024 - Updated environmental parameters

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v3.0: October 1, 2023 - Major revision of integration protocols

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v2.1: May 15, 2023 - Updated API specifications

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v2.0: January 10, 2023 - Initial release

9. APPROVAL AND AUTHORIZATION

APPROVED BY:

Marcus Depth

Chief Technology Officer

NaviFloor Robotics, Inc.

Date: January 15, 2024

Dr. Elena Kovacs

Chief Research Officer

NaviFloor Robotics, Inc.

Date: January 15, 2024