







# STREAMLINED AUTOMATION FOR EFFICIENT MATERIAL MOVEMENT



FLEET MANAGEMENT SUITE | MOBILE ROBOTS | FLEET APPLIANCES



### INTRODUCTION

Welcome to Zieder Robotics, where cutting-edge technology meets unparalleled innovation. Explore our comprehensive range of autonomous mobile robot solutions designed to optimize your operations and transform your business.

### **MOBILE ROBOTS**

The Mobile Robot Range offers state-of-the-art Autonomous Mobile Robots (AMRs) engineered to enhance efficiency and productivity in industrial settings. Our flagship product, the Tow Tractor T1000, combines advanced navigation capabilities with robust design to streamline material transport operations seamlessly.

### **FLEET MANAGEMENT SUITE**

Zieder's Fleet Management Suite is a comprehensive solution tailored to meet the diverse needs of modern enterprises. From Fleet Manager and Fleet Dispatcher to Fleet Intelligence and Semantic Modeler, our suite empowers businesses to manage, optimize, and analyze their robot fleets with unparalleled efficiency.

### FLEET APPLIANCES

Zieder's Fleet Appliance range offers plug-and-play solutions to simplify deployment and management of robot fleets. From Fleet Controller Appliance and Namespace Appliance to Fleet Intelligence Appliance, these appliances provide scalable and efficient fleet management solutions out of the box.

# ZIEDER ROBOTICS THE MOBILE ROBOT RANGE



**TOW TRACTOR T1000** 



Autonomous Mobile Robots (AMRs) are advanced robots designed to navigate and operate independently within various environments, using sophisticated sensors, cameras, and artificial intelligence. Unlike traditional automated systems that follow fixed paths, AMRs can dynamically understand and react to their surroundings, making them highly adaptable and efficient.

The Tow Tractor T1000 from Zieder Robotics is a cutting-edge Autonomous Mobile Robot (AMR) designed to revolutionize material transport operations in industrial environments. With advanced navigation capabilities and robust construction, the T1000 offers unparalleled efficiency and reliability.



### **KEY FEATURES**

- **Autonomous Navigation:** The Tow Tractor T1000 uses advanced sensors and mapping technology to navigate autonomously, reducing manual intervention.
- Payload Capacity: With a robust design and high payload capacity, the T1000 efficiently transports heavy loads, enhancing productivity.
- **Safety Features:** Equipped with obstacle detection and collision avoidance technology, the T1000 ensures safe operation.
- **Intuitive Interface:** The user-friendly design allows easy programming and customization, ensuring seamless integration into existing workflows.

### **BENEFITS**

- **Increased Efficiency:** The Tow Tractor T1000 automates material transport, reducing cycle times and enhancing operational efficiency.
- Cost Savings: By minimizing manual labor and optimizing resources, the T1000 lowers labor costs and boosts profitability.
- Manufacturing: Streamlines material flow between production lines, assembly stations, and storage areas.
- Warehousing: Improves goods movement, order picking, and replenishment in warehouses and distribution centers.
- Logistics: Enhances supply chain operations and reduces lead times in logistics hubs, ports, and distribution facilities.



### **TECHNICAL SPECIFICATIONS**

### **Navigation Features:**

Obstacle Detection: Yes (TF)

• Collision Avoidance: Yes

• Emergency Stop: Yes

Maximum Speed: 1.5 m/s

### **Navigation Technology:**

Navigation System: Nav 2

Mapping Technology: SLAM

### **Power & Battery:**

Power Source: 230 V @50/60Hz

• Power Rating: 800 W

• Charging Time: 120 mins

• Operating Time: 180 mins

• Charger Type: Auto Charging Dock

• Powertrain Voltage: 24 V

· Current Rating: 20 ah

• Battery Type: Lithium-Ion

· Battery Life: 3 Years

### **Dimensions:**

· Length: 570mm

• Width: 452mm

• Height: 240mm

· Weight: 50 kg

### **Payload Capacity:**

• Towing Capacity: 1000kg

Carrying Capacity: 250 kg



### ZIEDER ROBOTICS FLEET MANAGEMENT





### **PRODUCT OVERVIEW**

SUITE

Welcome to Zieder Robotics' Fleet Management Suite, a comprehensive solution designed to empower businesses with the tools they need to manage, optimize, and analyze their robot fleets efficiently. Explore our suite of products below to discover how you can streamline your operations and maximize the performance of your robot fleet.

- Fleet Manager
- **♥** Fleet Intelligence
- Fleet Dispatcher
- Semantic Modeler



### **FLEET MANAGER**

Zieder Fleet Manager is a centralized platform that provides real-time visibility and control over your entire robot fleet. From monitoring fleet performance to optimizing routes, it offers powerful features to streamline fleet management operations.

### **KEY FEATURES**

- · Real-time Fleet Monitoring
- · Route Optimization
- Task Scheduling and Assignment
- · Performance Analytics and Reporting
- · Integration with Third-Party Systems

### **BENEFITS**

- Improved Operational Efficiency
- · Enhanced Fleet Visibility and Control
- · Increased Productivity and Throughput
- Reduced Downtime and Maintenance Costs
- Scalable and Customizable Solution

## FLEET MANAGER

### FLEET DISPATCHER

Zieder Fleet Dispatcher enables businesses to efficiently allocate tasks, manage workflows, and optimize resource utilization across their robot fleet. It enables dynamic task assignment and real-time tracking to maximize productivity.

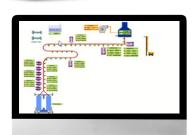
### **KEY FEATURES**

- Dynamic Task Assignment
- · Real-time Task Tracking
- Workload Balancing
- Priority-Based Task Management
- Integration with ERP and WMS Systems

### BENEFITS

- Optimal Task Allocation and Resource Utilization
- Improved Workforce Efficiency
- · Reduced Response Times and Delays
- · Enhanced Customer Satisfaction
- Seamless Integration with Existing Systems







### FLEET INTELLIGENCE

Zieder Fleet Intelligence leverages advanced analytics and machine learning algorithms to provide actionable insights into fleet performance and operational efficiency. From predictive maintenance to performance optimization, it helps businesses make data-driven decisions.

### **KEY FEATURES**

- Predictive Maintenance
- Performance Analytics and KPI Tracking
- Anomaly Detection and Root Cause Analysis
- · Optimization Recommendations
- · Integration with IoT Devices and Sensors

### **BENEFITS**

- · Proactive Maintenance Planning
- Enhanced Equipment Reliability and Availability
- Reduced Downtime and Operational Costs
- · Increased Asset Performance and Lifespan
- · Data-driven Decision Making for Continuous Improvement

### **SEMANTIC MODELER**

The Semantic Modeler from Zieder enables businesses to create and manage semantic models for their robot fleets, facilitating seamless integration with existing systems and processes. It enhances interoperability and simplifies fleet management tasks.

### **KEY FEATURES**

- Semantic Model Creation and Editing
- Data Mapping and Translation
- Interoperability with Industry Standards
- Integration with Enterprise Systems
- Version Control and Change Management

### BENEFITS

- Simplified Integration with External Systems
- Standardized Data Exchange Formats
- Enhanced Interoperability and Compatibility
- Improved Data Quality and Consistency
- · Streamlined Configuration and Management Processes





### ZIEDER ROBOTICS FLEET APPLIANCES





### **PRODUCT OVERVIEW**

Zieder's Fleet Appliance range offers plug-and-play solutions to simplify deployment and management of robot fleets. From Fleet Controller Appliance and Namespace Appliance to Fleet Intelligence Appliance, these appliances provide scalable and efficient fleet management solutions

- ✓ Fleet Controller Appliance 
   ✓ Namespace Appliance
- Fleet Intelligence Appliance



### FLEET CONTROLLER APPLIANCE

Zieder Fleet Controller Appliance is a hardware solution that provides centralized control and management of robot fleets. It offers easy integration with existing infrastructure and ensures seamless communication between fleet components.

### HARDWARE SPECIFICATION

- **CPU**: Intel Core i7-9700TE, 2.0 GHz
- **RAM**: 16GB DDR4 to 32GB
- Storage: 512GB SSD
- **Graphics**: Integrated Intel UHD Graphics 630
- I/O Ports: 4 x USB 3.0
- 4 x RS-232/422/485
- 2 x Gigabit Ethernet
- Power Supply: 24V DC input
- OS: Windows 10 IoT Enterprise, Ubuntu Linux



### NAMESPACE APPLIANCE

The Namespace Appliance from Zieder provides a unified namespace for managing and coordinating robot fleet operations. It simplifies communication and data sharing between fleet components, enhancing overall system efficiency.

### **HARDWARE SPECIFICATION**

- **CPU**: Intel Core i7-9700TE, 2.0 GHz
- RAM: 16GB DDR4 to 32GB
- Storage: 512GB SSD
- I/O Ports: 4 x USB 3.0
- 4 x RS-232/422/485
- 2 x Gigabit Ethernet
- Power Supply: 24V DC input
- **OS**: Windows 10 IoT Enterprise, Ubuntu Linux



### FLEET INTELLIGENCE APPLIANCE

Zieder Fleet Intelligence Appliance is a powerful hardware solution that enables real-time monitoring and analysis of fleet performance. It offers advanced analytics capabilities and predictive maintenance features to optimize fleet operations.

### HARDWARE SPECIFICATION

- CPU: Intel Core i7-9700TE, 2.0 GHz
- RAM: 16GB DDR4 to 32GB
- Storage: 512GB SSD
- I/O Ports: 4 x USB 3.0
- 4 x RS-232/422/485
- 2 x Gigabit Ethernet
- Power Supply: 24V DC input
- OS: Windows 10 IoT Enterprise, Ubuntu Linux







### WHY CHOOSE ZIEDER ROBOTICS?

- **Innovative Technology**: Zieder Robotics leads in automation with advanced AI, sensors, and machine learning, ensuring our AMRs are cutting-edge and reliable.
- **Unparalleled Efficiency**: Our solutions, like the Tow Tractor T1000, streamline operations, reduce cycle times, and boost productivity by automating repetitive tasks.
- **Comprehensive Solutions**: From AMRs to our Fleet Management Suite, we offer integrated solutions for managing, optimizing, and analyzing your robot fleet efficiently.
- Scalability and Flexibility: Our products are scalable and customizable to grow with your business and adapt to your specific operational needs.
- **Enhanced Safety**: Equipped with advanced safety features, our robots reduce the risk of workplace accidents, ensuring safe operation in dynamic environments.
- **Cost Savings**: By minimizing manual labor and optimizing resources, our solutions lower labor costs and improve profitability.
- **Expert Support**: Gain access to dedicated support and extensive expertise, ensuring smooth and effective system operation.
- **Sustainability**: Our solutions optimize operations to reduce waste, helping businesses move towards sustainable practices.

### **ABOUT US**

At Zieder Robotics, which is a division of Zefere Navigation, we are passionate about helping businesses solve material movement challenges through cutting-edge automation solutions. With a focus on innovation, reliability, and customer satisfaction, we strive to equip businesses with advanced robotics technologies that enhance efficiency, productivity, and competitiveness.

### **CONTACT US**

Address: Zefere Navigation Pvt Ltd #201, Sree Homes Plot No. 51, MB Society, Madhapur, Telangana 500084 contact@zefere.com

