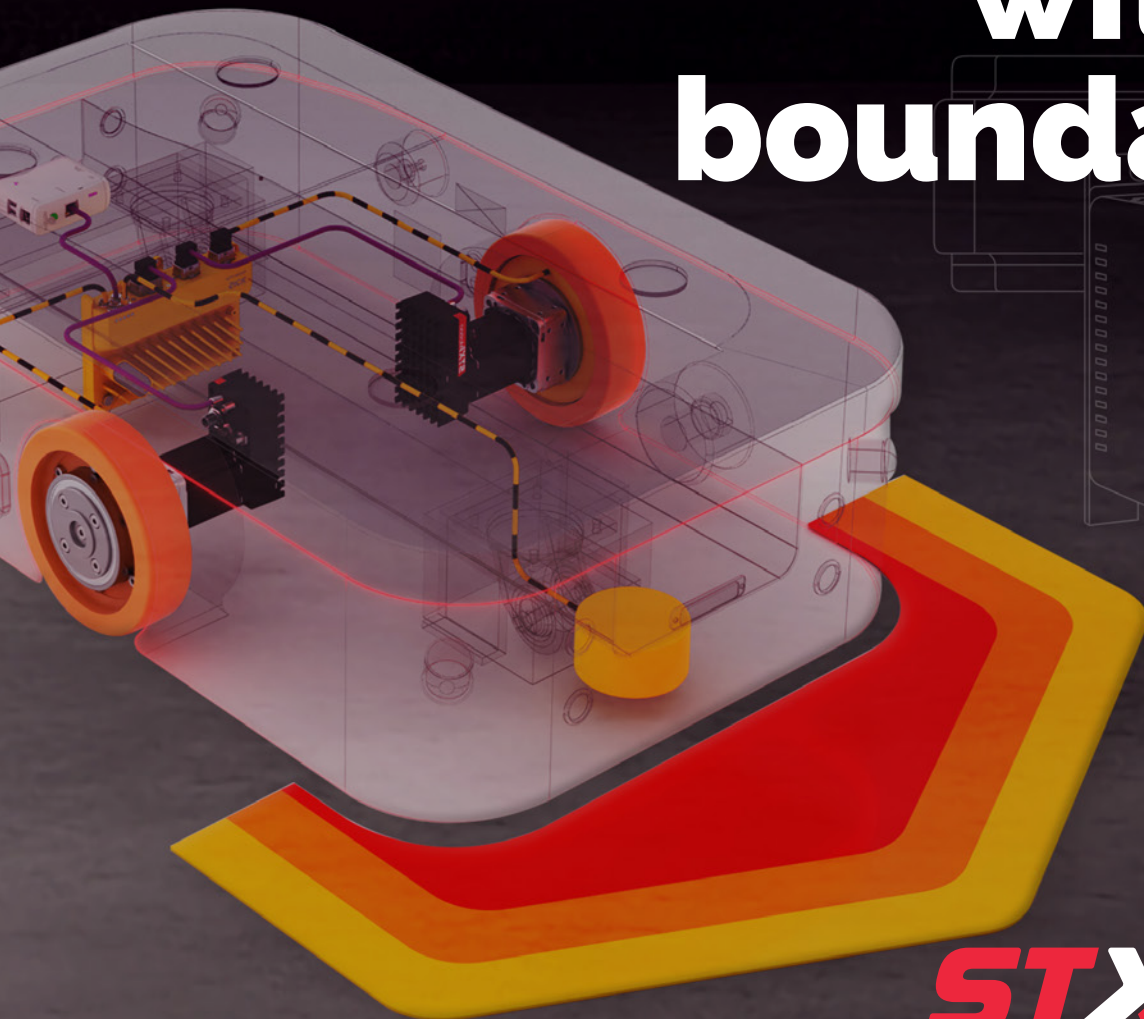


Design your  
mobile robots  
**without  
boundaries.**



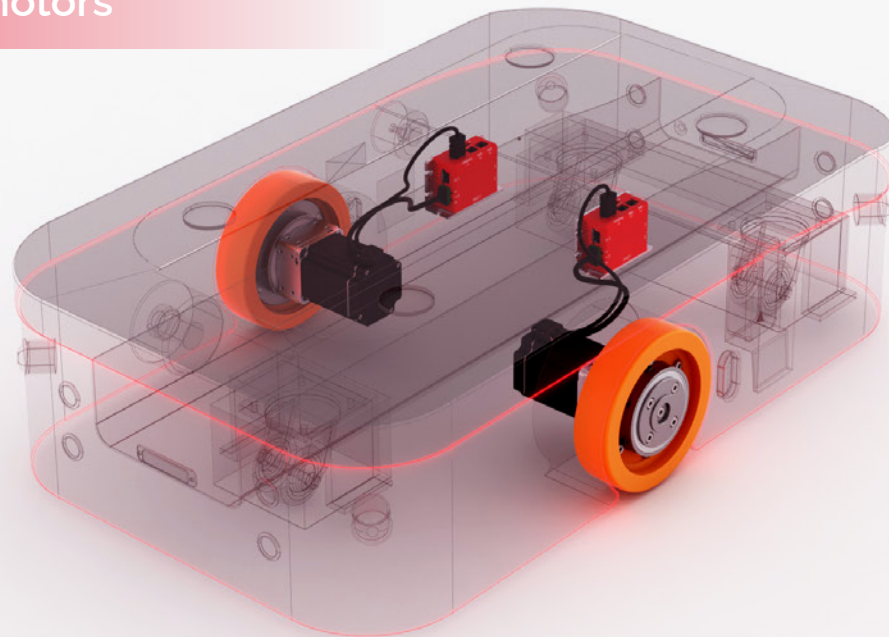
**STXi**Motion  
Motion. Optimized.

# Optimized wheel-drive systems

## Compact drives and gear motors

A complete and ready-to-use wheel drive system optimized for the requirements of automated guided vehicles and autonomous mobile robots.

A compact servo drive and gear motor with an integrated brake and encoder maximize space savings and simplify the cabling and mechanical design of the mobile vehicle.

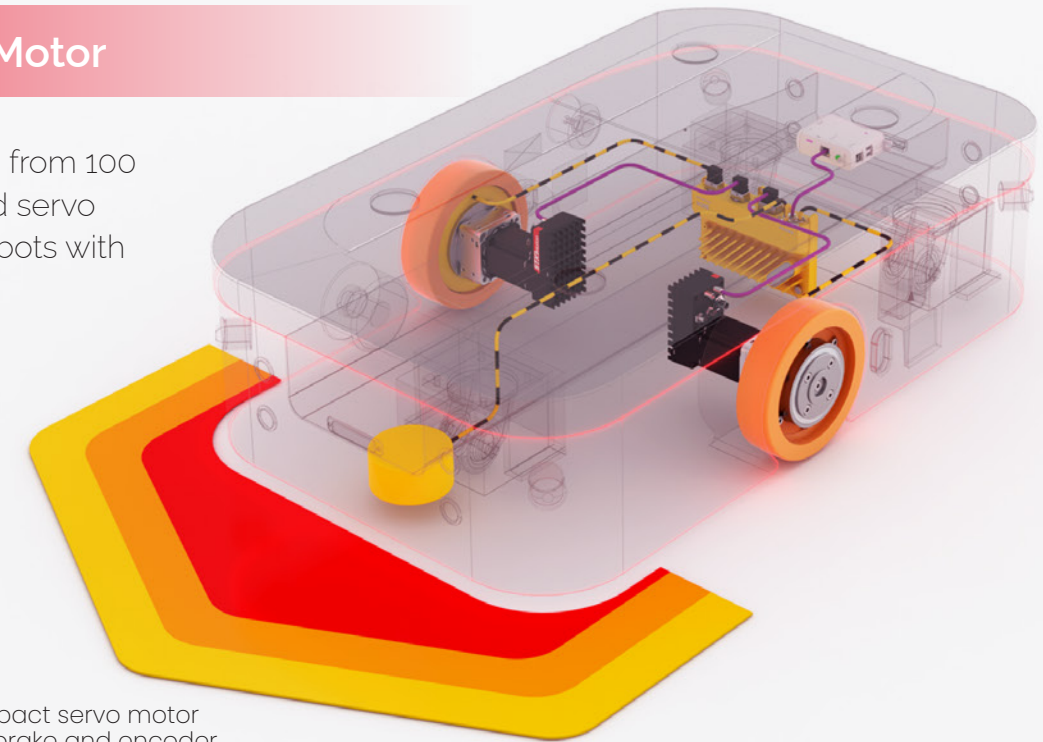


**Compact.**  
**Robust.**  
**Efficient.**  
**Safe.**

## Integrated Wheel-Hub Motor

Boasting a power range spanning from 100 to 800 W, the new TIM integrated servo motor series is ideal for mobile robots with limited design space.

TIM also supports absolute single-turn and multi-turn encoders, which, together with functional safety, meet the full range of resolution and safe operation requirements of diverse applications.



## Safe Motion Using A Standard Incremental Encoder

According to ISO 3691-4, PL d

An STO SIL3, Cat 3, PL e safety function can be connected to a PLC/motion controller and/or safety controller. Two additional non-safe encoders can be connected from the motor to the safety controller (e.g., Flexi Mobile from SICK) for safe motion monitoring, minimizing the complexity of the AGV design.

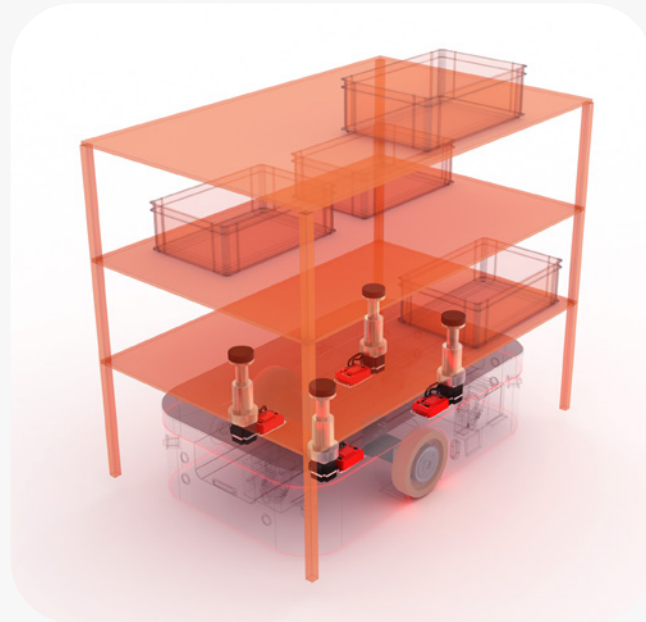
# Customized motion from head to wheel



Our products and solutions are used in a wide range of applications, accommodating the increasing demand for multiple axes and application flexibility in mobile robots. In addition to the traction axes, STXI's drives and motors are used for lifting mechanisms and other auxiliary motion axes, such as rotating units and telescopic manipulators.

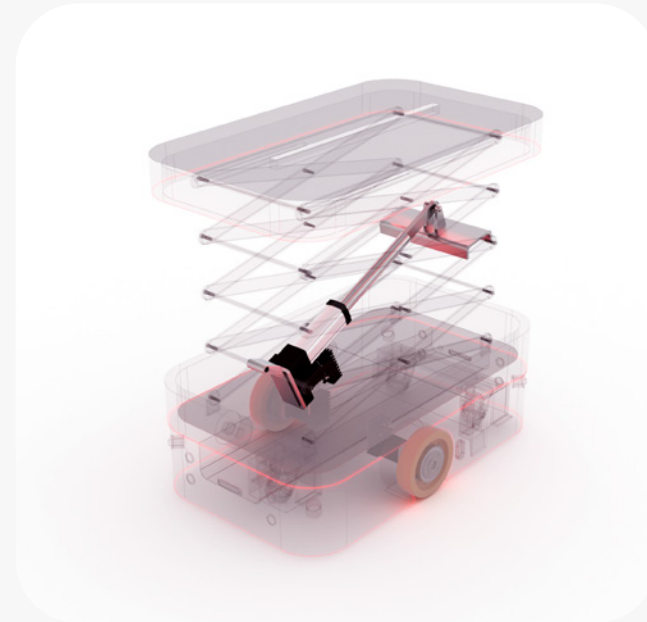
## Fast and Agile Product Modifications

Our products allow diverse configurations, including brake and planetary gear options and different mechanical variants, allowing flexibility in the positioning and orientation of the electronics and connectors.



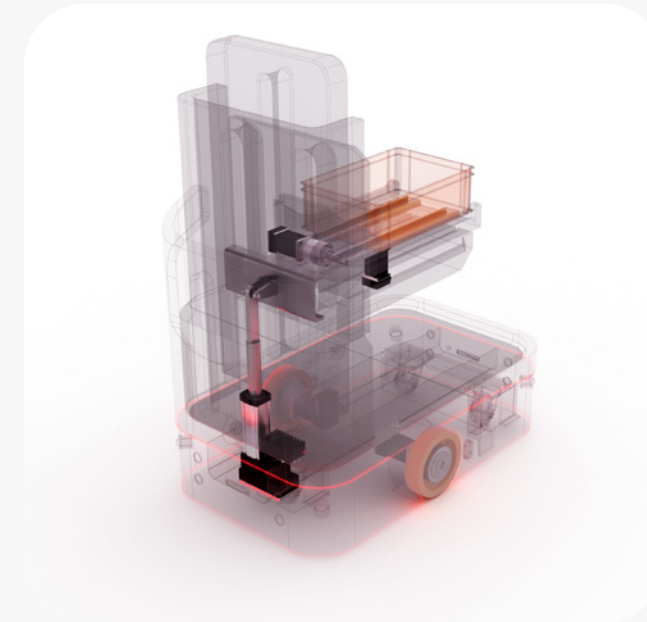
### Lifting mechanism with drives and motors

Distributed motion control with servo drives and servo motors to achieve smooth actuation for rack and pallet lifting applications.



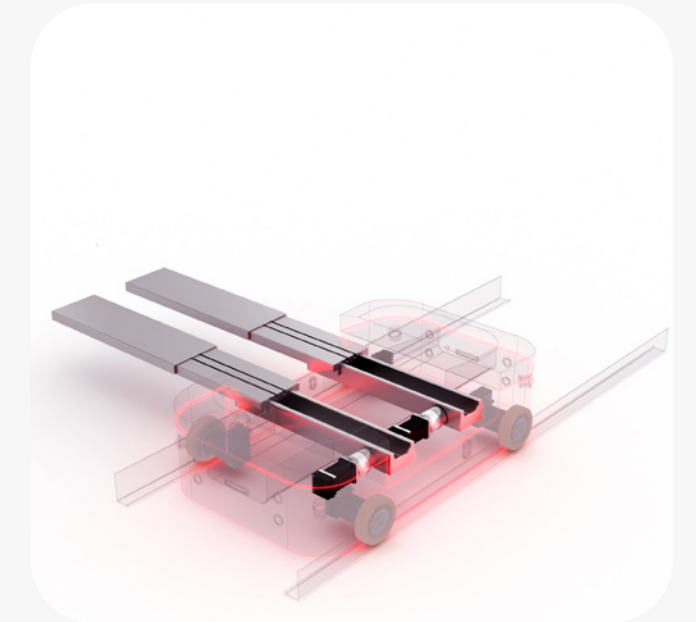
### Centralized elevation with integrated actuators

Using TIM integrated servo motors combined with a linear actuator to control a scissor lift mechanism.



### Fork, tilt and lift axes

TIM Integrated servo motors control the rotating box picking unit. Also suitable for load handling attachments and mobile robot arms.



### Telescopic Manipulators in shuttle systems

Integrated gearmotors are an ideal solution for actuating telescopic axes and in a variety of shuttle systems/ASRS applications.

# Low voltage motion for peak performance



## SERVO DRIVES



**ZED** SERVO DRIVES

### ZED Low Voltage Servo Drives

- ▶ Current (cont./peak): 15/70 Arms
- ▶ Voltage: 24-48 VDC



**CDHD2**

### CDHD2 Low Voltage Servo Drives

- ▶ Current (cont./peak): 3/30 A rms
- ▶ Voltage: 48 VDC



**RAYON** Harsh Environment

### RAYON Harsh Environment Drives

- ▶ Current (cont./peak): 55/750 A rms
- ▶ Voltage: 48 VDC

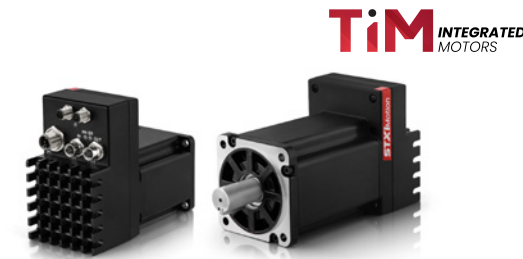


**RAYON** Embedded Modules

### RAYON Embedded Modules

- ▶ Current (cont./peak): 12.5/40 A rms
- ▶ Voltage: 48 VDC

## INTEGRATED MOTORS



**TiM** INTEGRATED MOTORS

### TiM Integrated Servo Motors

- ▶ Frame size: 60 mm, 80 mm
- ▶ Rated torque: 0.64-2.55 Nm
- ▶ Rated speed: 3,000 rpm
- ▶ Voltage: 24-48 VDC



**stepIM** Powered by SERVOTRONIX

### stepIM Integrated Stepper Motors

- ▶ Frame size (NEMA): 17, 23, 34
- ▶ Holding torque: 0.35-7.70 Nm
- ▶ Voltage: 14-75 VDC

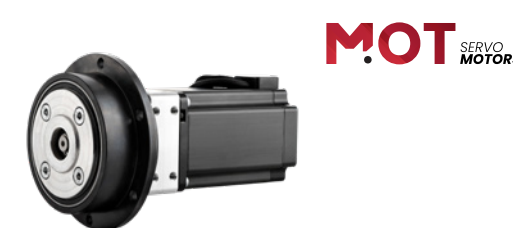
## SERVO MOTORS



**MOT** SERVO MOTORS

### MOT Low Voltage Servo Motors

- ▶ Flange size: 60 mm, 80 mm
- ▶ Power: 200-800 W
- ▶ Rated torque: 0.64-2.55 Nm
- ▶ Peak torque: 1.92-7.6 Nm
- ▶ Voltage: 24-48 VDC



**MOT** SERVO MOTORS

### MOT Low Voltage Gearmotors

- ▶ Power: 200 W, 400 W, 500 W, 900 W
- ▶ Peak torque: up to 120 Nm
- ▶ Voltage: 24-48 VDC
- ▶ Wheel size: 150 - 200 mm

# Motion solutions that **drive our customers forward**



Decentral  
architecture  
& durability

## Goods-to-person robots

Decentralized motion solutions for the traction and auxiliary axes of both lift and cart robots, used in goods-to-person order fulfillment. The specific design of the mechanical interfaces facilitated a seamless integration process. In addition, the robust wheel-drive system is tolerant to the high shock and vibration caused when driving over bumps and uneven flooring.



Compact  
& robust,  
the perfect  
match

## Mobile transport robots

Sturdy wheel-drive motion system with high power density. Suitable for operation in harsh environments and on rough floor surfaces. The optimized servo motor with planetary gear enables a high starting torque and smooth operation over a wide speed range.



Smooth  
operation in  
extreme  
temperatures

## Shuttle systems / ASRS

A ruggedized and food-grade servo solution for a shuttle system in pallet storage and handling operation. The comprehensive operational temperature range permits the use in refrigerated warehouses.

# Engineering. Made better.

With unmatched industry know-how and over 35 years of experience using the most innovative technologies, STXI offers smart, flexible, and cost-effective motion solutions, precisely designed for peak performance, seamless integration and optimal efficiency.

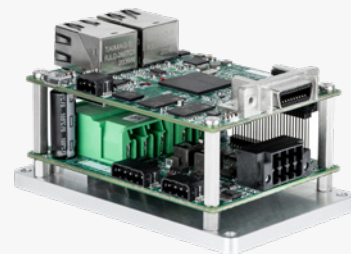
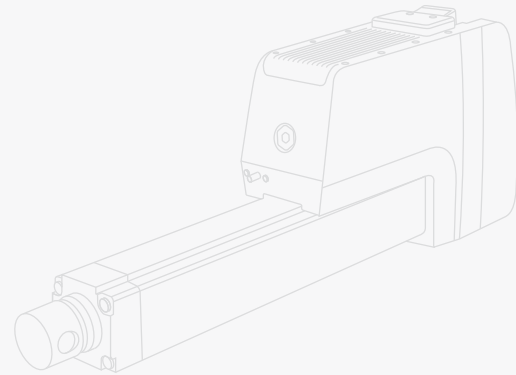
## Smart Actuation

An end-to-end solution, providing a complete integrated axis. Combining integrated motors, a gearbox or actuator, and a brake- with one part number and one ownership, creating a fully-functional smart actuation solution.

## Custom Electronics

Combining extensive knowhow and field-proven software and hardware building blocks, we provide fast and accurate development of the ideal solution for your motion challenges.

From minor modifications to full customization, we integrate any peripheral functionalities required to simplify and optimize your design.



# Your ideal motion partner.

01

### Your Partner from Day 1

Supporting our customers in converting their motion needs to optimized product specifications.

02

### Market-Driven Solutions

Product development based on market forecasts, creating segment-optimized solutions.

03

### Industry Know-How

Unmatched industry know-how to simplify and optimize your design.

04

### Extensive Global Network

A deep-rooted global network of partners puts us at the forefront of the global industry.

05

### Sourcing Capabilities

Strategic partnerships with key component providers to ensure alternating resources when needed.

06

### Fast Time to Market

Fast modification and adaptation to our customers' needs based on field-proven software and hardware building blocks.

07

### Built to Scale

Flexible and localized production lines allow our customers to scale with ease.

08

### Product Lifetime Support

Guaranteed lifetime support and production of your product, making sure your machine can be manufactured for decades to come.

Trusted motion partner of



STÄUBLI



Brooks



Universal

BIZERBA

GINNATI

SAFELOG

CAJA

KARL MAYER



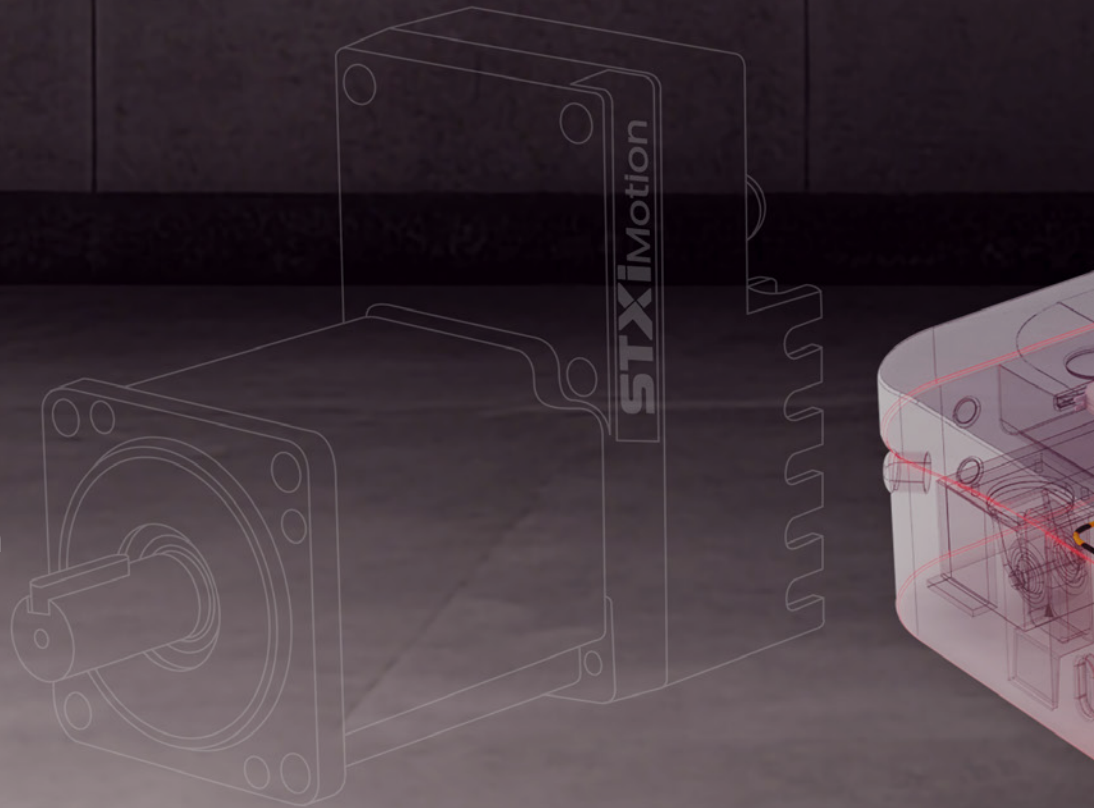
FABRIC

# **STXi**Motion

Motion. Optimized.



[contact@stxim.com](mailto:contact@stxim.com)  
[stxim.com](http://stxim.com)



## **Headquarters**

**STXI Motion Ltd.**  
21C Yagia Kapayim St.  
Petach Tikva  
4913020 Israel  
  
+972-74-7776899

## **North America**

**STXI Motion Inc.**  
27475 Ferry Road.  
Warrenville, IL. 60555  
USA  
  
+1-630-408-7033

## **Europe**

**STXI Motion GmbH**  
Dülkener Straße 5  
41334 Nettetal  
Germany  
  
+49-2153-1299950

## **Korea**

**STXI Motion Korea Inc.**  
BIZ Tower # 1315,57-2 Heungan-daero  
427 beon-gil Dongan-gu, Anyang-si,  
Gyeonggi-do (14059) South Korea  
  
+82-31-8068-5604