INDUSTRIAL AUTOMATION TRANSMISSION ROBOT
GROUND RAIL TRUSS MANIPULATOR

PROFESSIONALISM, COLLABORATION, INNOVATION, AND VALUE

NON STANDARD TRUSS MANIPULATOR ROBOT TRACK MANUAL

2026YEAR



Tiktok QR code

For more product information, product information video cases, and installation video tutorials, please visit the official website of Dongjin or the official Tiktok www.dgdojin.com or consult directly by phone

WeChat QR code

DONGGUAN DONGJIN INTELLIGENT EQUIPMENT CO., LTD

MOB:17620362021

TEL:0769-81885135

ADD:Building 3-4, Guancheng Industrial Park, No. 99 Jinghai West Road, Shatou South District, Dongguan City, Guangdong Province (whole building)

DONGGUAN DONGJIN INTELLIGENT EQUIPMENT CO., LTD

CONTENTS

01 COMPANY PROFILE

02 ONE STOP SERVICE CAPABILITYA

03 MAIN PRODUCTS

04 ONE STOP SERVICE CAPABILITY

05 COOPERATION PARTNERS

东锦智能 TOKY INTELLIGENCE

COMPANY PROFILE

16m Large gantry milling machine with ultra large stroke processing capability

A company that provides integrated services

Self-designed > Processing > Welding > Install > Debug > On-site installation

100+ Total number of employees

15year+ Industry experience



Dongguan Dongjin Intelligent Equipment Co., Ltd. is a national brand enterprise specializing in providing coordinate robot solutions in the field of industrial robots and automation. The company has always been at the forefront of the development of coordinate robotic arms and is among the national brands that use advanced FA technology to continuously assist in the evolution of society and industry as a research, development, and manufacturing expert.

Our company's products encompass high-precision transmission components such as multi-axis robotic arms, linear motors, precision positioning slide tables, linear slide tables, heavy-duty modules, truss manipulators, and robotic ground rails. Our company is a high-tech enterprise that integrates design, research and development, manufacturing, and sales.

Continuously innovating, we are more dedicated to the research and development of linear drive technology and products, providing you with more professional, precise, and reliable products and technologies, and contributing to the core components of China's automation industry.

HAVING EXTENSIVE EXPERIENCE IN LARGE-SCALE PROJECT CASES



Huizhou Yiwei Xiaopeng Automotive Battery Pack Stacking and Box Entry Longmen Four Axis with Rotating Axis Truss Project

- ◇ (3.5T load, ± 0.1 repeat positioning accuracy)
- ◇ (End customer has accepted, with case pictures and videos available)



Ningde Times PACK Package Offline Battery Pack Stacking Longmen Three Axis Conveyor Belt Rotation Project

- ◇ (2.5T load, ± 0.05 repeat positioning accuracy)
- ◇ (End customer has accepted, with case pictures and videos available)

东锦智能 TOKY INTELLIGENCE



Huizhou BYD Automatic Robot Welding ground rail project

- ◇ (Load 10T ground rail, ± 0.1)
- ◇ (End customer has accepted, with case pictures and videos available)



Zhuzhou CRRC automatic cable bundling 2 sets of 100 meter ground rails

- ◇ (Ultra long travel ground track)
- ◇ (End customer has accepted, with case pictures and videos available)



Chengdu AVIC WHA3-P1P2,Xiaomi Automotive Battery Pack Stacking Line Longmen Four Axis Project

- ◇ (1.8T load, ± 0.05 repeat positioning accuracy)
- ◇ (End customer has accepted, with case pictures and videos available)

PRODUCTION WORKSHOP/MACHINING CENTER/WELDING WORKSHOP









PARAMETER DESCRIPTION OF PROCESSING MACHINE TOOL

5-meter Longmen Machining Center - Machine Tool Parameter Table

(Actual measured blade length size 120mm)	Longmen width	X Axis	Y Axis	Z Axis	Distance from elbow to working face (Highest distance)	The distance between the elbow and the workbench Distance (minimum distance)	Bend stroke
	2580mm	5670mm	3160mm	1130mm	1350mm	360mm	1000mm
5-meter overall straightness: 0.02mm flatness: 0.05mm							

6-meter Longmen Machining Center - Machine Tool Parameter Table

(Actual measured blade length size 120mm)	Longmen width	X Axis	Y Axis	Z Axis	Distance from elbow to working face (Highest distance)	The distance between the elbow and the workbench Distance (minimum distance)	Bend stroke
	2788mm	6500mm	3250mm	1400mm	1350mm	360mm	1000mm
6-meter overall straightness: 0.01mm flatness: 0.014mm							

9-meter gantry machining center - machine tool parameter table

(Actual measured blade length size 120mm)	Longmen width	X Axis	Y Axis	Z Axis	Distance from elbow to working face (Highest distance)	The distance between the elbow and the workbench Distance (minimum distance)	Bend stroke
	2150mm	9012 mm	4100mm	800mm	1130mm	210mm	920mm
9-meter-long straightness: 0.01mm flatness: 0.015mm							

16 meter gantry milling - machine parameter table (with automatic measuring head)

(Actual measured blade length size 120mm)	Longmen width	X Axis	Y Axis	Z Axis	Distance from elbow to working face (Highest distance)	The distance between the elbow and the workbench Distance (minimum distance)	Bend stroke
	6450mm	16500 mm	2800mm	1150mm	1350mm	380mm	1000mm
16m overall straightness: 0.01mm flatness: 0.015mm							

东锦智能 TOKY INTELLIGENCE

RECEIVE HONORS


认证证书
东莞市东锦智能设备有限公司
统一社会信用代码：91441900MA52N7605
注册地址：广东省东莞市长安镇沙头社区沙头合新街4号1号楼
生产/经营地址：广东省东莞市长安镇沙头合兴路19号B栋一楼
质量管理体系
符合标准：GB/T 19001-2016/ISO 9001:2015
认证范围：生产传动智能设备及销售
初次注册日期：2023-09-01
发放/改版日期：2023-09-01
批准编号：KC308H8019Q
失效日期：2026-08-31
上海开成认证有限公司
中国上海市杨浦区宁国路313弄7号602


重合同守信用企业
东莞市东锦智能设备有限公司
AAA


传动设备行业诚信单位
东莞市东锦智能设备有限公司
AAA


质量服务诚信单位
东莞市东锦智能设备有限公司
质量服务诚信单位等级为
AAA


东莞市东锦智能设备有限公司
AAA级诚信经营示范单位
全国信用信息招投标服务平台
华信瑞诚（北京）信用评估有限公司



QUALIFICATION CERTIFICATE

9001 Certified Enterprise

A splicing type welded ground rail with stable structur
Utility Model Patent Certificate

A sky rail device for loading and unloading materials
Utility Model Patent Certificate

A safe all day rail device with anti detachment function
Utility Model Patent Certificate

A loading and unloading truss robotic arm
Utility Model Patent Certificate

A long stroke truss manipulator
A shock-absorbing and noise reducing robot seventh axis ground rail

Motor driven gear rack sliding table
One line linear module testing fixture

A seventh axis ground rail with enhanced load capacity

A Sampling and Evaluation System and Method for Testing the Transmission Speed of Robot Modules (Invention Patent)



统一社会信用代码
91441900MA52DLJ665

营业执照

(副 本)(1-1)

扫描二维码登录"国家企业信用信息公示系统"了解更多登记、备案、许可、监管信息

名 称 东莞市东锦智能设备有限公司

注册资本 人民币壹仟万元

类 型 有限责任公司(自然人投资或控股)

成立日期 2018年10月22日

法定代表人 张顺

住 所 广东省东莞市长安镇靖海西路99号3号楼

经营范围 一般项目：工业机器人制造；智能机器人的研发；智能机器人销售；工业机器人销售；工业机器人安装、维修；轴承、齿轮和传动部件制造；轴承、齿轮和传动部件销售；通用设备制造（不含特种设备制造）；机床功能部件及附件制造；机床功能部件及附件销售；机械电气设备销售；齿轮及齿轮减、变速箱销售；有色金属压延加工；机械零件、零部件加工；货物进出口；技术进出口。（除依法须经批准的项目外，凭营业执照依法自主开展经营活动）

登记机关 东莞市市场监督管理局

2025 年 06 月 26日

请于每年6月30日前报送年度报告，逾期将受到信用惩戒和处罚。
途径：登陆企业信用信息公示系统，或"东莞市场监管"微信公众号。

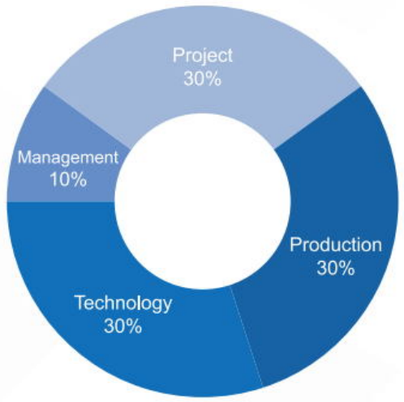
国家企业信用信息公示系统网址：http://www.gsxt.gov.cn

市场主体应当于每年1月1日至6月30日通过国家企业信用信息公示系统报送公示年度报告

国家市场监督管理总局监制

LAYOUT AND PERSONNEL COMPOSITION





COMPOSITION OF COMPANY PERSONNEL

RADIATING THROUGHOUT THE COUNTRY WITH GUANGDONG AS THE CENTER

100+People
Total number of people

6000m²
Factory area

ONE STOP SERVICE
CAPABILITY



Standard seventh axis



The standard seventh axis is driven by a servo motor and transmitted through precision reducers, gears, and racks. It has stable motion and high repeat positioning accuracy, making it perfect for automatic factory environments such as spot welding, machining, logistics, and palletizing.

PARAMETER

Specifications	Standard seventh axis
Equipment load	200-4000kg
Running speed	0.5m-1m/s
Acceleration	0.5m-1m/s²
Installation method	Ground installation (expansion bolt)
Number of robot installations	1-3 units (customizable if additional robots need to be installed)
Drive Type	Communication servo motor drive
Valid itinerary	1-100m (1m interval, customized for special and extra long travel)
Repetitive positioning accuracy	±0.05mm
Installation requirements	Environmental temperature: 0~45 degrees Celsius
	Environmental humidity: usually at 75% RH or below (without condensation), short-term at 95% RH or below (within 1 month)
	Vibration value: 0.5G or below

Step on standard seventh axis



The stepped standard seventh axis is driven by a servo motor and transmitted through a precision planetary reducer, rack, and gear. A steel plate cover is added to the standard seventh axis, which can be stably stepped on by people with stable movement and high repeatability. It can be perfectly used in spot welding, frame, logistics, palletizing and handling, as well as harsh automated factory environments.

PARAMETER

Specifications	Step on standard seventh axis
Equipment load	200-4000kg
Running speed	1-3m/s
Acceleration	1-3m/s²
Installation method	Ground installation (expansion bolt)
Number of robot installations	1-3 units (customizable if additional robots need to be installed)
Drive Type	Communication servo motor drive
Valid itinerary	1-100m (1m interval, customized for special and extra long travel)
Repetitive positioning accuracy	±0.05mm
Installation requirements	Environmental temperature: 0~45 degrees Celsius
	Environmental humidity: usually at 75% RH or below (without condensation), short-term at 95% RH or below (within 1 month)
	Vibration value: 0.5G or below

东锦智能 TOKY INTELLIGENCE

Semi closed seventh axis



The semi enclosed seventh axis is a linear motion guide platform designed specifically for use in harsh environments; The semi closed type is suitable for the coating industry where the glue mist evaporates greatly, as well as for spot welding and handling.

PARAMETER

Specifications	Semi closed seventh axis
Equipment load	500-6000kg
Running speed	1-2m/s
Acceleration	1-2m/s²
Installation method	Ground installation (expansion bolt)
Number of robot installations	1-3 units (customizable if additional robots need to be installed)
Drive Type	Communication servo motor drive
Valid itinerary	1-100m (1m interval, customized for special and extra long travel)
Repetitive positioning accuracy	±0.05mm
Installation requirements	Environmental temperature: 0~45 degrees Celsius
	Environmental humidity: usually at 75% RH or below (without condensation), short-term at 95% RH or below (within 1 month)
	Vibration value: 0.5G or below

Organ fully enclosed seventh axis



The fully enclosed accordion style seventh axis is a linear motion guide platform designed specifically for use in environments such as cutting, impurities, and small particles in automated factories. The accordion can be equipped with a stainless steel armor cover on the outside.

PARAMETER

Specifications	Organ fully enclosed seventh axis
Equipment load	500-6000kg
Running speed	1-2m/s
Acceleration	1-2m/s²
Installation method	Ground installation (expansion bolt)
Number of robot installations	1-3 units (customizable if additional robots need to be installed)
Drive Type	Communication servo motor drive
Valid itinerary	1-100m (1m interval, customized for special and extra long travel)
Repetitive positioning accuracy	±0.05mm
Installation requirements	Environmental temperature: 0~45 degrees Celsius
	Environmental humidity: usually at 75% RH or below (without condensation), short-term at 95% RH or below (within 1 month)
	Vibration value: 0.5G or below

东锦智能 TOKY INTELLIGENCE

Roller box seventh axis



The seventh axis of the roller box is a linear motion guide rail platform specially designed for heavy-duty robots. It has the characteristics of fast speed, high precision, long stroke, and heavy load, and can be used in lithium battery new energy handling, stamping line automation, semiconductor industry, military industry and other occasions. The transmission method consists of components such as a roller box, high-precision rack, and low backlash worm gear reducer, which can be used in harsh environmental conditions.

PARAMETER

Specifications	Roller box seventh axis
Equipment load	500-13000kg
Running speed	1-2.5m/s
Acceleration	1-2m/s²
Installation method	Ground installation (using chemical bolts)
Number of robot installations	1-4 units (customizable if additional installation is required)
Drive Type	Communication servo motor drive
Valid itinerary	1-100m (1m interval, customized for special and extra long travel)
Repetitive positioning accuracy	±0.05mm
Installation requirements	Environmental temperature: 0~45 degrees Celsius
	Environmental humidity: usually at 75% RH or below (without condensation), short-term at 95% RH or below (within 1 month)
	Vibration value: 0.5G or below

Robot inverted seventh axis



The inverted seventh axis of the robot is a linear motion guide platform specifically designed for machining loading and unloading, with fast speed and high precision. Suitable for machining industries with high levels of cutting impurities; It is also applicable to various industries such as automated loading and unloading of machine tools and material handling.

PARAMETER

Specifications	Robot inverted seventh axis
Equipment load	500-3000 kg
Running speed	1-2m/s
Acceleration	1-2m/s²
Installation method	Ground installation (using chemical bolts)
Number of robot installations	1-3 units (customizable if additional robots need to be installed)
Drive Type	Communication servo motor drive
Valid itinerary	1-100m (1m interval, customized for special and extra long travel)
Repetitive positioning accuracy	±0.05mm
Installation requirements	Environmental temperature: 0~45 degrees Celsius
	Environmental humidity: usually at 75% RH or below (without condensation), short-term at 95% RH or below (within 1 month)
	Vibration value: 0.5G or below

东锦智能 TOKY INTELLIGENCE

Dynamic beam suspended robot truss



The dynamic beam suspended robot truss refers to the assembly of industrial robots at the terminal of the gantry truss to expand the working range of the robot and increase the flexibility of the equipment.

Installation requirements

Environmental temperature: 0~45 degrees Celsius

Environmental humidity: usually at 75% RH or below (without condensation), short-term at 95% RH or below (within 1 month)

Vibration value: 0.5G or below

PARAMETER

Specifications	Dynamic beam suspended robot truss
Equipment load	500-2000 kg
X-axis operating speed	1-2m/s
X-axis acceleration	1-2m/s²
X-axis travel	1-100m
Y-axis operating speed	1-2m/s
Y-axis acceleration	1-2m/s²
Y-axis travel	1-10m
Installation method	Ground installation (using chemical bolts)
Number of robot installations	1-4 units (customizable if additional robots need to be installed)
Drive Type	Communication servo motor drive
Repetitive positioning accuracy	±0.05mm

Truss robot



The truss robot is mainly used to match industrial robots and can perfectly match mainstream brand models in the market. Robots can be installed on the side, inverted, and explored downwards.

PARAMETER

Specifications	Truss robot
Equipment load	100-2500kg
Running speed	1-2m/s
Acceleration	1-2m/s²
Installation method	Ground installation (using chemical bolts)
Number of robot installations	1-3 units (customizable if additional robots need to be installed)
Drive Type	Communication servo motor drive
valid itinerary	1-100 meters (with a spacing of 1 meter, customized for special and extra long travel)
Repetitive positioning accuracy	±0.05mm
Installation requirements	Environmental temperature: 0~45 degrees Celsius Environmental humidity: usually at 75% RH or below (There should be no condensation), Short term at 95% RH or below (within 1 month) Vibration value: 0.5G or below

东锦智能 TOKY INTELLIGENCE

Longmen truss manipulator



Longmen truss manipulator, also known as truss manipulator, is a fully automatic industrial equipment built on the basis of a right angle X, Y, Z coordinate system, which adjusts the workstation of the workpiece or realizes the trajectory movement of the workpiece.

Installation requirements

Environmental temperature: 0~45 degrees Celsius

Environmental humidity: usually at 75% RH or below (without condensation), short-term at 95% RH or below (within 1 month)

Vibration value: 0.5G or below

PARAMETER

Specifications	Longmen truss manipulator
Equipment load	100-2000kg
XY axis running speed	1-2m/s
Z-axis operating speed	0.1-1m/s
XY axis acceleration	1-2m/s²
Z-axis acceleration	0.1-1m/s²
X-axis travel	1-100m
Y-axis travel	1-12m
Z-axis travel	0.1-4m
Installation method	Ground installation (expansion bolt) (chemical bolt)
Installation quantity of mobile Z-axis	1-4 (customizable non-standard)
Drive Type	Communication servo motor
Repetitive positioning accuracy	±0.05mm
lubrication method	automatic lubrication
protection method	General protection methods (exposed), organ protection, sheet metal protection
Horizontal correction method for truss	Special adjustment bolts and nuts for trusses

Stacking type truss manipulator



The palletizing truss is suitable for the palletizing industry, and the terminal can be equipped with customized claws to meet differentiated needs by selecting the total length of the walking axis crossbeam, the number of claws, installation methods, and other configurations.

Installation requirements

Environmental temperature: 0~45 degrees Celsius

Environmental humidity: usually at 75% RH or below (without condensation), short-term at 95% RH or below (within 1 month)

Vibration value: 0.5G or below

PARAMETER

Specifications	Stacking type truss manipulator
Equipment load	100-2000kg
X-axis operating speed	1-2m/s
X-axis acceleration	1-2m/s²
X-axis travel	1-100m
Y-axis operating speed	1-2m/s
Y-axis acceleration	1-2m/s²
Y-axis travel	1-10m
Z-axis operating speed	0.2-1m/s
Z-axis acceleration	1m/s²
Z-axis travel	0.5-2m
Installation method	Ground installation (using chemical bolts)
Number of mobile axis installations	1-4 units (customizable if additional installation is required)
Drive Type	Communication servo motor drive
Repetitive positioning accuracy	±0.05mm
lubrication method	automatic lubrication
Horizontal correction method for truss	Special adjustment bolts and nuts for trusses

东锦智能 TOKY INTELLIGENCE

Cantilever three-axis truss manipulator



Cantilever three-axis truss manipulator is a fully automatic industrial equipment built on the basis of a right angle X, Y, Z coordinate system, which can adjust the workstation of workpieces or achieve functions such as trajectory movement of workpieces.

Installation requirements

Environmental temperature: 0~45 degrees Celsius

Environmental humidity: usually at 75% RH or below (without condensation), short-term at 95% RH or below (within 1 month)

Vibration value: 0.5G or below

PARAMETER

Specifications	Cantilever three-axis truss manipulator
Equipment load	10-300kg
X-axis operating speed	1-2m/s
X-axis acceleration	1-2m/s²
X-axis travel	1-100m
Y-axis operating speed	1-2m/s
Y-axis acceleration	1-2m/s²
Y-axis travel	1-10m
Z-axis operating speed	0.2-1m/s
Z-axis acceleration	1m/s²
Z-axis travel	0.5-2m
Installation method	Ground installation (using chemical bolts)
Number of mobile axis installations	1-4 units (customizable if additional installation is required)
Drive Type	Communication servo motor drive
Repetitive positioning accuracy	±0.05mm
lubrication method	automatic lubrication
Horizontal correction method for truss	Special adjustment bolts and nuts for trusses

Roller box gantry truss manipulator



The heavy-duty roller box truss manipulator is suitable for the lithium battery handling and palletizing industry, logistics and packaging areas, stamping line automation, semiconductor industry, medical equipment and other occasions. The transmission system consists of components such as a roller box, high-precision rack, and low backlash worm gear reducer. The roller box truss is suitable for use in harsh environmental conditions.

Installation requirements

Suggest installing one floor Environmental temperature: 0~45 degrees Celsius

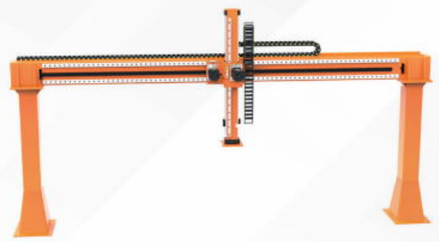
Environmental humidity: usually at 75% RH or below (without condensation), short-term at 95% RH or below (within 1 month)

Vibration value: 0.5G or below

PARAMETER

Specifications	Roller box gantry truss manipulator
Equipment load	100-5000kg
X-axis operating speed	1-2m/s
X-axis acceleration	1-2m/s²
X-axis travel	1-100m
Y-axis operating speed	1-2m/s
Y-axis acceleration	1-2m/s²
Y-axis travel	1-10m
Z-axis operating speed	0.2-1m/s
Z-axis acceleration	1m/s²
Z-axis travel	0.5-2m
Installation method	Ground installation (expansion bolt)
Number of mobile axis installations	1-4 units (customizable if additional installation is required)
Drive Type	Communication servo motor drive
Repetitive positioning accuracy	±0.05mm
lubrication method	automatic lubrication
Horizontal correction method for truss	Special adjustment bolts and nuts for trusses

Two axis cross truss manipulator



The two axis cross truss robotic arm is a linear motion guide rail platform designed for left-right movement, palletizing, loading and unloading, with fast speed, high precision, and long stroke. Suitable for industries such as machine tool loading and unloading, automated integrated palletizing and handling.

Installation requirements

Suggest installing one floor Environmental temperature: 0~45 degrees Celsius

Environmental humidity: usually at 75% RH or below (without condensation), short-term at 95% RH or below (within 1 month)

Vibration value: 0.5G or below

PARAMETER

Specifications	Two axis cross truss manipulator
Equipment load	0-1000kg
X-axis operating speed	1-2m/s
X-axis acceleration	1-2m/s²
X-axis travel	1-100m
Z-axis operating speed	1-2m/s
Z-axis acceleration	1-2m/s²
Z-axis travel	0.5-2.5m
Installation method	Ground installation (expansion bolt)
Number of mobile axis installations	1-4 units (customizable if additional installation is required)
Drive Type	Communication servo motor drive
Repetitive positioning accuracy	±0.05mm
lubrication method	automatic lubrication
Horizontal correction method for truss	Special adjustment bolts and nuts for trusses



APPLICATION **AREA**

Automotive Industry

Handling and palletizing of whole cars and car parts such as tires, brake pads, etc

Heavy Industry

Construction machinery
Iron and Steel Metallurgy

Machine Tool Processing

Machine tool loading and unloading transportation

Transportation and Energy

Train hub handling
Lithium battery handling, solar photovoltaics

Architecture

Prefabricated building module handling
Wood processing and handling

Warehousing and Logistics

Tobacco/beverages/food, etc Packing operation
Standard turnover box handling

COOPERATION
PARTNERS

大族激光 HAN'S LASER
HUAWEI
中国一汽
中国航天
CATL 宁德时代
东风风神
北京大学
清華大學
GREE 格力
vivo
BYD
中航工业
上海交通大学 Shanghai Jiao Tong University
武汉理工大学
哈爾濱工業大學



东锦智能 TOKY INTELLIGENCE