

公司简介
Company Profile

深圳市米朗科技有限公司
Shenzhen Miran Technology Co., Ltd

湖北米朗科技股份有限公司
Hubei Miran Technology Co., Ltd

部分产品简介 (非产品详细资料)
Brief Introduction of Some Products
(Not Detailed Product Information)



位移传感器领域的专家与领导者

Expert and leader in the field of displacement sensors

- 中国工信部高精度传感器一条龙应用计划示范项目
China Ministry of Industry and Information Technology high-precision sensor one-stop application plan demonstration project
- 国家级专精特新“小巨人”企业，国家级高新技术企业
State-level “Little Giants” enterprise-specialized and sophisticated enterprises that produce new and unique products, State-level High-tech Enterprise
- 中国工业强基重点产品，中国工信部传感器一条龙应用计划示范企业
Key products of robust industrial foundations in China, one-stop application plan demonstration enterprise of the Ministry of Industry and Information Technology of the People’s Republic of China

本样本仅为公司介绍及产品简介，如需各系列产品的详细选型及性能参数等资料，请联系我们。

This catalogue is only for company and product introduction, if you need more detailed information for selection or the product parameters please contact us.

位移传感器领域的开拓者、创新者、领跑者

ISO9001 CE



Pioneers, innovators and leaders in the field of displacement sensors

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米朗做什么？

What does Miran do?

米朗深耕于传感器的研发、制造已有20余年，公司秉承着“融创高新技术，为人类科技和工业的发展贡献智慧和力量”的企业使命，专注于位移、液位、物位、角度、倾角、压力等工业传感器及工业显示控制仪表等系列高科技产品的研发、制造和销售。同时米朗科技还是一家集中润滑油泵系统专业制造商。

MIRAN has been deeply engaged in the research and development and manufacturing of sensors for more than 20 years. Our company adhering to the corporate mission of “to create high and new technology, to contribute wisdom and strength to the development of human science and technology and industry”, the company focuses on the research and development, manufacturing and sales of industrial sensors, such as displacement, liquid level, material level, angle, inclination, pressure and also the display controller instruments. At the same time, Miran Technology is also a professional manufacturer of centralized lubricating system.

米朗的用户有哪些？

Applications of Miran Clients

米朗服务于智能装备制造、自动化系统、物联网系统集成和智慧城市建设工程等企业，为客户提供高端标准化传感器或定制化传感器产品及解决方案，在测控等领域为客户提供一站式解决方案的产品与服务。致力于成为中国传感器领域的开拓者、创新者、领跑者。

Miran serves enterprises such as intelligent equipment manufacturing, automation systems, the Internet of Things system integration and smart city construction projects, providing customers with high-end standardized sensor or customized products and solutions, provide customers with one-stop solution products and services in the field of measurement and control. We are committed to becoming a pioneer, innovator and leader in the field of sensors in China.



企业文化

Enterprise Culture

- 企业长期愿景：创造出能推动人类社会进步的优质产品，成为并被公认为提供卓越产品和服务的企业！
 - 企业短期愿景：让米朗位移传感器技术领先于世界，让世界爱上米朗制造！
 - 企业使命：融创高新技术，为人类科技和工业的发展贡献智慧和力量！
 - 核心价值观：科技创新，精益求精，用户至上，诚信为本！
 - 经营理念：以技术创新为核心，以客户需求为导向！
 - 管理理念：高效、协作、团结、友爱！
 - 品质理念：始终如一坚持高质量发展道路！
 - 企业精神：诚信、务实、合作、创新！
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- Enterprise Vision(long-term): Create quality products that can promote the progress of human society, and become a recognized company that could provide excellent products and services!
 - Enterprise Vision: Make Miran's displacement sensor technology ahead of the world, let the world choose Miran production!
 - Enterprise Mission: To create high and new technology, to contribute wisdom and strength to the development of human science and technology and industry!
 - MIRAN Values: Scientific and technological innovation, continuous improvement, customer first, integrity based!
 - Business Philosophy: Taking technological innovation as the core and customer demands as the guide!
 - Management Philosophy: Efficiency, cooperation, solidarity, friendship!
 - Quality Concept: Consistently adhere to the high quality development path!
 - Enterprise Spirit: Integrity, pragmatism, cooperation, innovation!



公司简介

Company Profile

深圳市米朗科技有限公司位于改革开放前沿窗口深圳市光明区，是经深圳市政府认定的高新技术企业，并荣获了国家高新技术企业认定证书。米朗公司自2003年成立以来，长期致力于研究各类传感器，主要以位移传感器系列产品为核心的研发、生产和销售，后相继又研发推出了其他各类传感器产品，至今已有20多年的丰富经验，现今已成为传感器行业专家，公司产品被工信部列为中国工业强基重点产品，公司被评为中国工信部传感器一条龙应用计划示范企业（米朗科技），公司的传感器项目列为中国工信部高精度传感器一条龙应用计划示范项目。米朗是国家级专精特新“小巨人”企业，国家级高新技术企业。

我们的发展方向是：以技术创新为核心，以客户的需求为导向，汇集产品研发、生产制造与销售一体，将会一直致力于在位移、液位、物位、角度、倾角、压力等工业传感器及工业显示控制仪表等测控领域，为客户提供一站式解决方案的产品与服务。

米朗集团有4家公司，分别为深圳市米朗科技有限公司、湖北米朗科技股份有限公司、湖北米朗科技股份有限公司武汉研发分公司、浙江米朗测控技术有限公司。深圳市米朗科技有限公司成立于2003年，设立在深圳市光明区核心地段，设有工程部、研发中心、制造部、检测中心、售后服务部、营销部以及遍布世界各地的直销办事处、代理商和经销商，为广大客户提供周到、及时的服务。米朗公司至今已有20多年的研发生产和运营经验，现今已成为技术成熟，拥有众多高新技术人才和先进设备及数十项专利的传感器和润滑油泵系统生产厂家，“米朗MIRAN”品牌系列的产品现已经广泛应用于世界各类机械设备、自动化控制、物联网等测控领域，现每年大约有数十万只的传感器销往世界各地。

公司主要研发、生产与销售的产品有：电位计/电阻式原理位移传感器（电子尺）、拉绳式位移传感器（拉绳式电子尺）、磁致伸缩原理位移传感器（无接触磁感应电子尺）、磁致伸缩原理液位传感器（液位计测控系统）、电位计原理以及霍尔磁敏非接触式等原理的角度传感器（角度尺）以及配套使用的V/A转换模块、各类LVDT差动变压位移传感器、电感调频式位移传感器、间隙位移传感器、振弦式位移传感器、电涡流位移传感器、超声波位移传感器、雷达液位计/物位计、静力水准仪、磁栅尺、倾角传感器、固定式测斜仪/智能测斜仪、三滑轮张力传感器、压力传感器、轮辐式称重传感器、传感器无线传输模块、显示控制器等及相关应用型产品。自动化机械或工程车辆等行业用的全自动/半自动润滑油泵及其油路配件系列产品。

米朗科技公司位于改革开放前沿窗口--深圳市光明区

Shenzhen Miran Technology Co., Ltd is located at the front place in Chinese Economic Reform -- Guangming District,

为了更好的满足客户日益增长的各项需求，2007年公司在美丽的帝乡-湖北省枣阳市,投资5亿多元筹建智能化的米朗科技工业园，成立了湖北米朗科技股份有限公司(曾用名:枣阳市米朗科技有限公司)，工业园占地面积300多亩，位于枣阳市发展大道、建设西路交汇处，规划现代化车间占地面积20万平方米，已建成面积6万平方米，引进现代化制造与检测设备3000余台。

优美的环境，标准化厂房，高精尖的智能化设备，完美的生产线，为产品品质和规模化的量产提供了坚实的基础。米朗工业园内设有研发中心，模具车间、数控加工车间、印刷生产线，无尘车间，生产组装成品车间，检测室等。每一款系列产品都制定专业的生产、检测流程，确保产品质量的标准性，一致性，产销量每年以30%的速度逐年递增。

公司技术力量储备雄厚，管理规范，注重知识产权保护，现获得传感器方面相关发明及实用新型等专利92项，其中发明专利20项，技术力量的储备，为企业战略发展培植了新的增长点。现场管理是品质保证，为向客户提供高品质产品，公司加大现场管理力度,为员工创造一个优良的生产环境，公司获得了ISO9001国际质量体系认证。严格按照国际质量认证标准组织设计和生产，米朗MIRAN系列产品获得湖北省著名商标，公司获得湖北省“重合同守信用”单位。

公司加大信息化建设，紧跟时代步伐，实施企业+互联网工程，加大培训互联网人才力度，促使公司产品和人才素质始终处于世界领先地位。经过20多年的技术沉淀和革新，20多年的市场验证，米朗MIRAN多款产品性能指标在很多方面已超越国外品牌并且已荣获国家多项实用新型专利证书。米朗用实力铸造了国内位移传感器行业领航者的地位。

当今世界，科技进步突飞猛进，我们精益求精，努力做好自己专业领域的产品；我们诚信经营，不断探索先进理念。我们愿意为实现中国制造走向世界的目标尽自己的一份力量，助力中国经济不断滚滚向前。



公司简介

Company Profile

Miran Technology Co.,Ltd is located at the front place in Chinese Economic Reform -- Guangming District, Shenzhen. Miran is High-tech enterprises which is recognized by Shenzhen municipal government, and won the National High-tech Enterprise Certification. Since the company founded in 2003, we are committed to the design, development, production and sales of displacement sensors. Our 20 years rich experience have made MIRAN the experts in sensors. MIRAN products have been listed as the key product by the Ministry of Industry and Information Technology of the People's Republic of China and the company is rated as one-stop application plan demonstration enterprise. The company's sensor projects are listed demonstration project of one-stop application plan for high-precision sensors of Ministry of Industry and Information Technology of China. MIRAN Technology is also the State-level "little giants" enterprise-specialized and sophisticated enterprises that produce new and unique products, State-level high-tech enterprise.

Our development direction is: technology innovation as the core, customer demand as the guidance, we will always be committed to providing customers with one-stop solutions for products and services in the fields of measurement and control, such as displacement, liquid level, material level, angle, inclination, pressure and also the display controller instruments.

MIRAN Technology has four companies, Shenzhen Miran Technology Co., Ltd and Hubei Miran Technology Co., Ltd.,Hubei Miran Technology Co.,Ltd. Wuhan R&D Branch.,Zhejiang Miran Measurement and Control Technology Co., Ltd.Shenzhen Miran Technology Co., Ltd was founded in 2003, set up in the core area of Guangming District, Shenzhen. In our factory we have the engineering department, R&D center, manufacturing department, testing center, after-sales service department, marketing department. We also have many direct sales offices, agents and distributors. All of these ensure us could provide thoughtful and timely service to our customers. Miran company has more than 20 years experience of research and development, production and operation, now has become a mature technology manufacturers that with many high-tech personnel and advanced equipment and dozens of patents sensor and lubricating system. "MIRAN" brand series of products have been widely used for many kinds of machinery and equipment, automation control, Internet of Things and other measurement and control field. At present, there are hundreds of thousands displacement sensors are sold around the world every year.

Our main products are: Potentiometer/resistive displacement sensor (electronic ruler), draw wire displacement sensor, magnetostrictive displacement sensor, magnetostrictive liquid level sensor (level gauge measurement and control system), and hall magnetically sensitive non-contact angle sensor and supporting V/A conversion module, LVDT displacement sensor, inductive frequency modulation displacement sensor, gap displacement sensor, vibrating wire crack meter, eddy current displacement sensor, ultrasonic sensor, radar-type level meters, hydrostatic level, magnetic grid sensor, tilt sensor, inclinometer, intelligent inclinometer, three-pulley tension sensor, pressure sensor, wheel load cell sensor, wireless transmission module, display controller and related application products. Also include the automatic/semi-automatic lubricating oil pump and its accessories.

米朗科技公司位于改革开放前沿窗口--深圳市光明区

Shenzhen Miran Technology Co.,Ltd is located at the front place in Chinese Economic Reform -- Guangming District, Shenzhen

In order to meet the growing needs of customers, our company increased investment and set up the Miran Industrial Park with a total area of more than 50 acres in 2007. We established the Hubei Miran Technology Co., Ltd(Zaoyang City Miran Science & Techology Co.Ltd). The planned modern workshop covers an area of 200,000 square meters and has been built 60,000 square meters, the introduction modern manufacturing and testing equipment more than 3,000 sets.

Beautiful environment,standardized plant, sophisticated intelligent equipment, perfect production line provide the basis for product quality and large-scale mass production. The industrial park has the R&D center, mold workshop, CNC machining workshop, printing production line, dust-free workshop, production and assembly workshop, testing room and so on. Each product is produced with professional production, testing process, to ensure the quality of the product .

The company has strong technical reserves, standardized management, pay attention to intellectual property protection, and has obtained 92 patents that related to sensor inventions and utility models. Among them, there are 20 invention patents, and the reserve of technical force has cultivated new growth points for the strategic development of enterprises. Site management is quality assurance to customers. The company increase on-site management efforts to provide high-quality products for customers, and create a good production environment for employees. The company has obtained ISO9001 International Quality System Certification. All the design and production is according to the international quality certification standards. MIRAN series of products won the famous trademark of Hubei Province. The company won Hubei Province “Contract and Keeping Promises” enterprises.

The company increased the information construction,keep up with the pace of the times, and increase training of Internet talents to promote the MIRAN products and talent quality always in a leading position in the world. After more than 20 years of technological precipitation and innovation, more than 20 years of market verification, many MIRAN product’s performance has surpassed foreign brands in many aspects and has won a number of national utility model patent certificates. MIRAN has cast the position of the leader of the domestic displacement sensor industry with its strength.

In the present world, science and technology are advancing by leaps and bounds, but we strive for excellence, strive to do well in our own professional field of products. We operate with integrity, and constantly explore advanced ideas. We would like to do our best to contribute a little to achieve the goal of the realization of made in China to the world and help the China’s economy keep moving for ward.



可企 08 优美的环境，标准化厂房，高精尖的智能设备，完美的生产线，

Beautiful environment, standardized plant, sophisticated intelligent equipment, perfect production line

发展历程

Development



校企合作

School Enterprise Cooperation



科技创新是企业健康、持续、快速发展的源动力，作为科技型企业，公司始终把产品研发放在重要位置，做到人才保障满足，资金保障满足，材料保障满足。公司自2018年以来，与华中科技大学组建产学研平台，成立传感器研发中心，创立华中科技大学-米朗生产实习基地，分批次组织华中科技大学学生来公司实习实训，并定期向华科提供研发课题。2020年与湖北文理学院签约产学研项目。公司还与上海同济大学合作共同研发轨道交通检测设备项目，正投入全国铁路系统测试中。米朗科技聚焦新型校企合作模式建设，共同打造创新驱动双方协同发展的技术引擎和人才培养基地，建立全国产学研的新样板。

Technological innovation is the driving force for the healthy, sustainable, and rapid development of enterprises. As a technology-based enterprise, our company has always placed product research and development in an important position, ensuring the satisfaction of talent guarantee, funding guarantee, and material guarantee. Since 2018, company has established an industry university research platform with Huazhong University of Science and Technology, established sensor research and development center, established the Huazhong University of Science and Technology - Miran Production Internship Base. Company also organized Huazhong University of Science and Technology students come to company for internships and training in batches, regularly provides research and development projects to Huazhong University of Science and Technology. In 2020, signed an industry university research project with Hubei University of Arts and Sciences. Company also collaborating with Tongji University in Shanghai to jointly develop a rail transit detection equipment project, which is currently being put into national railway system testing. Miran Technology focuses on the construction of a new model of school enterprise cooperation, jointly creating a technology engine and talent training base that drives collaborative development between both parties through innovation, and establishing a new model for national industry university research.

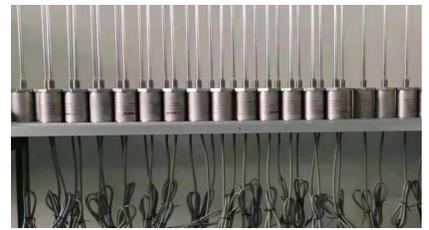


通过20多年的努力，公司的传感器项目已成为亚洲行业龙头，公司研发的各类传感器系列产品，获得了欧盟的CE认证，获得了行业各类专利证书，磁致伸缩位移/液位传感器系列产品,获得国家防爆认证证书。每年向国内外客户提供数十万件优质的传感器系列产品，产品已被广泛应用于工控自动化行业的位移测量系统，传动设备的润滑系统，铁路的监测等领域，在产品的可靠性、稳定性、精度、抗恶劣环境等性能方面得到市场的广泛认可。

Through more than 20 years effort, the company's sensor project has become leader in Asian industry. Various series sensor products developed by the company have obtained CE Certification from the European Union, various Industry Patent Certificates, magnetostrictive displacement/liquid level sensor series products, and National Explosion-proof Certification. Every year, we provide hundreds of thousands of high-quality sensor series products to domestic and foreign customers. Our products have been widely applied in displacement measurement systems in the industrial control automation industry, lubrication systems for transmission equipment, railway monitoring, and other fields. Our products are widely recognized in the market for their reliability, stability, accuracy, and resistance to adverse environments.

制造能力

Manufacturing Capability



所有产品的核心材料均精选自世界最先进地区的最优材料；产品设计理念，取国内外品牌众家之长，并研究产生了大量自己独有的技术专利；2013年后推出的产品更是结合本公司几十年的研发生产工艺经验和客户长期使用效果的反馈，经反复改进后，产品各项性能指标在在各个方面均已全面高出同行业的国外进口品牌，并且已荣获国家多项实用新型专利证书。

公司大部分产品都有取得欧盟CE认证，获得了行业各类专利证书，电位计原理的位移传感器，拉绳位移传感器，磁致伸缩位移/液位传感器等系列产品，获得国家防爆认证证书。公司获得ISO9001国际质量体系认证，严格按照国际质量认证标准组织设计、生产和销售，确保产品质量、用户满意。

The core materials of all products are carefully selected from the best materials in the world's most advanced regions. The product design concept draws on the strengths of domestic and foreign brands, and has researched and produced a large number of unique technical patents of our own. The products launched after 2013 are combined with our company's decades of experience in research and development, production, and manufacturing processes, as well as feedback from customers on long-term usage effects. After repeated improvements, the performance indicators of the products have comprehensively surpassed foreign imported brands in the same industry in all aspects, and have won multiple national utility model patent certificates.

Most of the company's products have obtained EU CE Certification, various Industry Patent Certificates, displacement sensors based on potentiometer principles, rope displacement sensors, magnetostrictive displacement/liquid level sensors, and other series of products, and have obtained National Explosion-proof Certification. Company also obtained ISO9001 International Quality System Certification and strictly organizes design, production, and sales in accordance with international quality certification standards to ensure product quality and customer satisfaction.

品牌优势

Brand Advantages

一、强大的研发力量，“米朗MIRAN”品牌基于电位计原理的位移传感器（俗称：电子尺）基板中采用高精度电脑激光修刻技术，并反复多次改进相关工艺，精度远高于同行业水平，从而打造精雕细琢的线性精度和重复性精度。公司继掌握了基于电位计原理“位移传感器”核心技术后，先后又自主开发出了基于磁致伸缩原理的非接触式位移传感器，拉绳式位移传感器和角度传感器等产品。所有产品均有自主知识产权，并且获得相关技术行业专利，技术水平十分先进。

二、苛刻的各项检测环境要求，每一批产品出厂之前都要经过震动试验、高低温试验、电磁干扰测试、寿命检测、防爆测试等等，以确保产品质量可靠、性能卓越。

三、强大的生产力量，公司在深圳光明区和湖北枣阳都设立有生产基地，供货及时，现货充足，可以满足大批量订货的需求。

四、完善的销售和售后服务体系。公司立足深圳，在全球各地主要工业聚集地设立多个直属办事机构，并广泛发展代理商和经销商，所有出厂产品均可获得专业的终身维护，确保让客户满意。

公司秉承“科技创新，精益求精，用户至上，诚信为本”的企业核心价值观，为客户提供优质的产品和服务。欢迎广大客户来电、来函、来信，咨询、洽谈、合作或者光临指导。并欢迎广大客户结合自身需求，沟通我司定制相关产品。

I. With strong research and development capabilities, the displacement sensor (commonly known as electronic ruler) substrate of the "MIRAN" brand, based on the principle of potentiometers, adopts high-precision computer laser etching technology and repeatedly improves related processes, with accuracy far higher than the industry level, thus creating finely crafted linear accuracy and repeatability accuracy. After mastering the core technology of displacement sensors based on the principle of potentiometers, company has independently developed non-contact displacement sensors based on magnetostriction, rope type displacement sensors, and angle sensors. All products have independent intellectual property rights and have obtained relevant technology industry patents, with advanced technological levels.

II. Strict testing environment requirements require each batch of products to undergo vibration testing, high and low temperature testing, electromagnetic interference testing, life span testing, explosion-proof testing, etc. before leaving the factory, to ensure reliable product quality and excellent performance.

III. Strong production force, our company has established production bases in Guangming District, Shenzhen and Zaoyang, Hubei Province, providing timely supply and sufficient stock to meet the demand for mass orders.

IV. Comprehensive sales and after-sales service system. Our company based in Shenzhen and has established multiple directly affiliated offices in major industry clusters around the world, has also extensively developed agents and distributors, all factory products can receive professional lifelong maintenance to ensure customer satisfaction.

Our company adheres to the core values of "technological innovation, continuous improvement, customer first, and integrity-based", providing customers with high-quality products and services. Welcome customers to call, write, inquire, negotiate, cooperate, or visit for guidance. And also welcome customers to communicate with us to customize related products based on their own needs.



核心基础产品简介

Core Basic Products Introduction

电位计原理位移传感器（俗称：电子尺）

米朗研发生产的基于电位计原理的位移传感器，在工艺的先进性、材料的选择、结构的设计等方面都远远高于同行业其他厂商。因此，米朗的传感器产品已被广泛应用于汽车、塑料机械、传动设备、测量系统、医疗等领域，在产品的可靠性、稳定性、精度、抗恶劣环境等性能方面得到市场的广泛认可。

米朗依据不同的测量原理，分别基于电位计原理、拉线/绳电位器/编码器原理、以及磁致伸缩测量原理、差动变压器原理（LVDT）、电涡流、磁栅、倾角原理等，开发了不同系列的位移传感器，以适应不同场合应用的需求。其中，基于电位计原理的传感器原理简单，内部没有复杂的信号处理电路，结构也很简单，因此，产品的可靠性非常高。而先进的电阻材料处理工艺、多触点贵金属电刷、特殊的滑刷支撑和电阻基片材料的选择以及坚固的外壳提升了产品的耐用性，该类型传感器的使用寿命可以达到上亿次的往复运动，在正常使用的情况下，基本不用考虑该传感器的使用寿命问题。独特的电脑控制激光蚀刻技术，使米朗的电位计式传感器具有很高的线性精度、很平滑的微线性特性、微米级的重复性精度，非常适合应用于精密位置和速度测量的闭环控制系统中。

而随着米朗的传感器被越来越多的行业所应用，特别是在工程机械、车辆移动设备、重型机械设备等配套中，对传感器的信号接口、抗震性能、特殊温湿环境等提出了更高要求。因此，米朗又基于磁致伸缩测量原理开发出了非接触式的直线位移传感器。该系列传感器特殊的结构设计，适合内置高压的液压或气动环境使用，具有很强的抗震性能，适合高温高湿的应用环境。关于磁致伸缩测量技术的传感器，我们有专门的产品资料介绍，请参照米朗磁致伸缩位移传感器彩页选型参考。

米朗的电位计原理的直线位移传感器从测量移动的方式上分为拉杆式、滑块式、回弹式等，这些传感器具有几乎相同的电气特性，只是针对不同应用场合对传感器的工作范围、安装方式等不同的要求而设计。同样出于不同安装方式的考虑，传感器除了标准的KTC1、KTF等系列，还有KTC2、KTM、KPM等系列微型传感器。而WY-01系列传感器则考虑在恶劣环境下使用的要求（水、油或者粉尘较多的环境），对传感器外壳的材料和拉杆往复运动轴承密封处的结构进行了专门的防尘防油/水设计，使该系列传感器比较标准型具有更强的抗震、耐高温高湿、抵御水、油污和粉尘等性能。针对被测量对象不方便与传感器直接连接的应用场合，米朗还开发出了内置和外置复位弹簧的直线位移传感器KTR系列，测量杆与被测量对象通过滚轮或圆点接触，被测物体位置的移动，可以通过滚轮或圆点接触传递给传感器，而无需将传感器的测杆固定在被测移动物体上。

2013年公司又开发出了磁阻式位移传感器，通过磁性游标取代传统位移传感器中的阻轴，传感器结构更紧凑，即通过磁铁吸力带动内部电刷移动，使内部电器结构与外部运动结构完全隔离开来，可达到防水防油防尘的作用，其中PME14等系列可在水下长期使用。因此，米朗的系列直线位移传感器给客户提供了很大的选择空间，客户可以根据实际应用情况、安装尺寸、精度、连接方式、行程、输出信号、应用环境等特殊要求，选择合适的传感器。米朗可以为客户提供完善的售前、售后服务，以确保客户作出适合的产品选型，并得到长期持续的售后服务，从而帮助客户提升产品整体的质量和市场竞争力。

“米朗MIRAN”—专业的直线位移传感器制造商。

公司拥有优秀的生产技术与制造工艺，并斥资千万从国外购进先进仪器和生产设备。米朗公司现已成为中国直线位移传感器行业生产和销售的率先企业，产品在中国市场占有极大的份额，并且远销海外。

产品以其优良的性价比、齐全的规格品种，逐渐成为各大品牌厂商的选择。并且成为海天、震德、震雄、力劲、伊之密、东华、博创、宝捷、拓斯达、联升、伟达、优铸等一些国内知名企业的供应商。公司以其优良的品质、完善的售后服务在业界内获得一致好评，并且在各大厂商中拥有良好的口碑。

随着我国各个工业领域的不断升级，直线位移传感器现正成为各种设备和仪器位移监控的重要手段。产品应用广泛，适用于：各类注塑机、压铸机、橡胶机、液压机、制鞋机、纸品机械、印刷机、纸箱设备、飞机操舵、船舶操舵、五金冲压的送料机、高压开关测试仪、IT设备、张力调节装置、自动化检测等设备，近些年在桥梁监测、山体滑坡等地灾监测、建筑墙体及地铁监测等物联网行业也得到广泛的应用。

“米朗MIRAN”品牌电位计原理的位移传感器（俗称：电子尺）在中国市场已有20多年的销售和使用历史。经过广大客户的长期使用验证，普遍反映良好。

综合起来，有如下几大优点：

稳定的质量、及时的供货、完善的售后服务、跟踪服务和可追溯性体系、不断的持续改进。

现就上述几点分述如下：

一、稳定的质量，稳定的质量需要先进的设计、先进的设备和先进的制造工艺来保证。因此，在引进国外先进技术的基础上，结合国内的实际情况和严酷的使用环境，不断改进和完善产品的质量性能。首先，从设计上优化，消除了不足。有以下几个方面：

1.提升了防护等级，使产品能适应中国工厂的使用环境，并能使电子尺在接近复杂实际工厂的条件下工作，适应现场的恶劣环境，延长使用寿命，保证电子尺更加可靠长周期的工作。耐高温性能好，耐油抗老化。

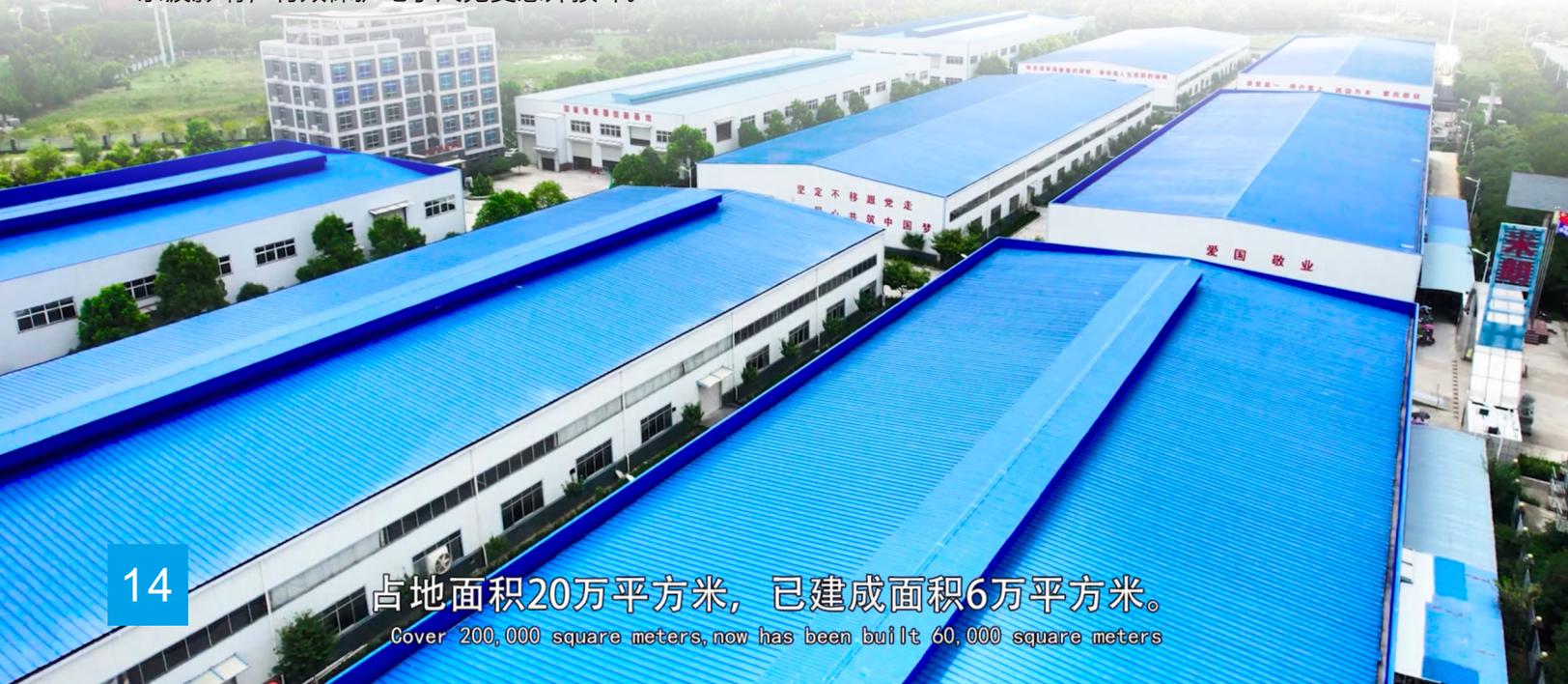
2.加强了抗震性能，通过严格控制运动部件间隙，采用吸震含油滑动件，对设备的振动具有吸收，保持输出稳定，使其能够在设备的震动条件下能长期正常地工作。

3.增加了产品的抗拉强度，针对产品在使用中易被意外拉出的现象，改变了拉杆卡簧结构，使拉杆能承受轴向75kg的拉力，并且有较好的缓冲余量。结构强度高。

4.增加了产品电性接地的可靠性，使产品能够抗静电、杂波及其它不良的电磁辐射干扰，不受客户的使用习惯的不良影响。

5.改善了输入、输出线的连结方式，针对国外有些同类产品的连接点易出现故障，我们对连接采用全新（铆接+焊接+银胶）以及（具有超高导电性能的插拔）方式，克服了单一连接方式的不足，可保证产品的长期稳定使用。

6.增加了基板的印刷次数，提高了印刷分辨率，有效地抑制了由于运动过程中电阻的不断变化而产生的杂波影响，有效保护电子尺免受意外损坏。



7.严格控制设计、制造体系和工艺，设计严格遵循科学方法，高标准设计，反复论证；所选用的原材料全部是先进发达国家的各优产品，制造过程中，从原材料的进货到半成品的加工，直到产品的出货检验，均严格按照ISO9001:2008国际质量体系所确立的标准执行。

8.采用先进的生产设备，保证过程参数的稳定、可靠，辅助以完善的检测手段，对导电膜的厚度、硬度、光洁度、线性度严格要求，保证了产品的品质特征。

9.持续追踪服务客户，在为客户提供优质服务的同时，并且到现场收集客户使用情况的一手资料，并据此对产品作出改善。可以看出，“米朗MIRAN”产品推出的二十多年，是精益求精不断改进的PDCA循环过程。凡是客户退回的产品，我们都进行严格验证，因此可以推测产品的三年期内故障率低于1%；根据我们专门回收更换的测评结果，平均无故障运行时间可达数十年以上，以这个指标来考核，我公司产品已经完全达到并超越了国外原装进口品牌的标准。而且，我们的产品经过不断的改进，各项指标将会更加提升。

二、及时的供货。为最大程度地为考虑客户所想，对于客户所实施的“零”库存管理模式，公司大力配合，在广大客户的最近点设立办事处，并设立仓库备货，在仓库保持有效库存，能够保证及时将产品送到客户现场，得到客户的认可。

三、完善的售后服务。公司将产品的售后服务作为产品质量的延伸，经常到客户的安装现场与客户进行讨论、解答客户的疑问，解决实际使用中可能遇到的问题。甚至应客户的要求，对最终用户进行服务，解决问题。因为，我们不希望由于对故障的误判导致客户的损失，而减少误判的有效方法就是在问题现场解决问题。我们也同时希望我们作为客户管理体系中的一个环节，被客户纳入，经常通知我们了解和解决一些现场问题。并且可以现场解决客户使用过程中遇到的问题，进而不断改进，提高用户产品的整体水平。

四、由于我们与客户的贴近，使我们能更好的跟踪服务，并对所有产品进行追溯，公司自2006年8月开始推广普及ISO9001:2000质量认证体系后，又普及了ISO9001:2008及ISO9001:2015质量体系认证，建立了产品的半成品、成品的跟踪档案，更能够与客户的体系进行交流，这是所谓的国外品牌不具备的，而这一优势恰巧是米朗科技能够不断进步、持续改善的基础。我们相信，有了这一基础，就能领先于其他同行。

五、公司不仅仅满足于目前客户的需要和对于产品的要求，更注重客户未来对产品的要求，公司目前正致力于进一步提高产品的抗振性、最大运行速度、最小杂波的开发工作，期望能进一步满足客户未来对高档次、高精度、高速度注塑机等设备的配置要求，确保在位移传感器行业保持我们的优势。

以上主要概述了基于电位计原理的位移传感器(电子尺)，如需详细资料，请联系米朗。

另自2006年以来，米朗开始加大研发投入，潜心研究，相继推出了其他各种基于不同物理原理的传感器产品，以下是各个产品系列大概介绍，如有需求可联系米朗索要具体的产品系列图册样本进行选型。



核心基础产品简介

Core Basic Products Introduction

Principle of potentiometer displacement sensor (commonly known as : electronic ruler)

The displacement sensor based on potentiometer principle developed and produced by Miran is far superior to other manufacturers in the industry in terms of progressiveness technology, material selection, structural design, etc. Therefore, Miran sensor products have been widely used in fields such as automobiles, plastic machinery, transmission equipment, measurement systems, and healthcare, and have been widely recognized in the market for their reliability, stability, accuracy, and resistance to harsh environments.

Miran has developed different series of displacement sensors based on different measurement principles, including potentiometer principle, wire/rope potentiometer/encoder principle, magnetostrictive measurement principle, differential transformer principle (LVDT), eddy current, magnetic grating, tilt angle principle, etc., to meet the needs of different applications. Among them, sensors based on the principle of potentiometers have a simple principle, without complex signal processing circuits inside, and their structure is also very simple. Therefore, the reliability of this product is very high. The advanced processing technology of resistance materials, multi contact precious metal brushes, special sliding brush supports, and the selection of resistance substrate materials, as well as the sturdy housing, enhance the durability of the product. The service life of this type of sensor can reach hundreds of millions of reciprocating movements, and under normal use, there is basically no need to consider the service life of the sensor. The unique computer-controlled laser etching technology enables Miran potentiometer type sensors to have high linear accuracy, smooth micro linear characteristics, and micrometer level repeatability accuracy, making them very suitable for application in closed-loop control systems for precision position and velocity measurement.

With the increasing application of Miran sensors in various industries, especially in supporting equipment such as construction machinery, vehicle mobile equipment, and heavy machinery, higher requirements have been put forward for the signal interface, seismic performance, and special temperature and humidity environments of the sensors. Therefore, Miran developed a non-contact linear displacement sensor based on the principle of magnetostriction measurement. The special structural design of this series of sensors is suitable for use in high-pressure hydraulic or pneumatic environments, with strong seismic performance, suitable for high temperature and high humidity application environments. We have specialized product information on sensors for magnetostrictive measurement technology. Please refer to the selection reference of Miran magnetostrictive displacement sensor color page.

The linear displacement sensor based on Miran potentiometer principle can be divided into rod type, slider type, rebound type, etc. in terms of measuring movement. These sensors have almost the same electrical characteristics, but are designed for different application scenarios with different requirements for the working range and installation method of the sensor. Due to different installation methods, in addition to the standard KTC1, KTF and other series, there are also KTC2, KTM, KPM and other series of miniature sensors. WY-01 series sensors, on the other hand, consider the requirements for use in harsh environments (environments with high levels of water, oil or dust), and have specially designed the material of the sensor housing and the structure of the sealing of the reciprocating bearing of the pull rod to prevent dust, oil, and water. This makes the series sensors have stronger seismic resistance, high temperature and humidity resistance, and resistance to water, oil, and dust compared to the standard model. For applications where it is inconvenient to directly connect the measured object to the sensor, Miran has also developed the KTR series of linear displacement sensors with built-in and external reset springs. The measuring rod contacts the measured object through rollers or dots, and the movement of the measured object's position can be transmitted through roller or dot contact. Provide sensors without fixing their measuring rods to the moving object being measured.

In 2013, company also developed a magnetoresistive displacement sensor, which replaces the resistance axis in traditional displacement sensors with a magnetic cursor. The sensor structure is more compact, that is it drives the internal electric brush to move through magnetic attraction, completely isolating the internal electrical structure from the external moving structure, which can achieve waterproof, oil proof, and dust proof effects. Among them, series such as PME14 can be used underwater for long time. Therefore, Miran's series of linear displacement sensors provide customers with a large selection space. Customers can choose the appropriate sensor based on specific requirements such as actual application conditions, installation dimensions, accuracy, connection methods, stroke, output signal, and application environment. Miran can provide customers with comprehensive pre-sales and after-sales services to ensure that they make suitable product choices and receive long-term and continuous after-sales service, thereby helping customers improve the overall quality and market competitiveness of their products.

“MIRAN”- Professional manufacturer of linear displacement sensors.

Company has excellent production technology and manufacturing processes, and has invested millions to purchase advanced instruments and production equipment from abroad. Miran Company has become a leading enterprise in the production and sales of linear displacement sensors in China, with products occupying a huge market share in the Chinese market and being exported overseas.

Products have gradually become the choice of major brand manufacturers due to their excellent cost-effectiveness and comprehensive specifications and varieties. And it has become a supplier to some well-known domestic enterprises such as Haitian, Zhende, ChenHsong, LK group, Yizumi, Donghua, Broche, Baojie, Topstar, Liansheng, Weida, Youzhu, etc. Our company has received unanimous praise in the industry for its excellent quality and comprehensive after-sales service, and has a good reputation among major manufacturers.

With the continuous upgrading of various industries in China, linear displacement sensors are now becoming an important means of displacement monitoring for various equipment and instruments. These product has a wide range of applications and is suitable for various types of injection molding machines, die-casting machines, rubber machines, hydraulic presses, shoe making machines, paper machinery, printing machines, cardboard equipment, aircraft steering, ship steering, hardware stamping feeding machines, high-voltage switch testers, IT equipment, tension adjustment devices, automation detection and other equipment. In recent years, it has been used in bridge monitoring, mountain landslide and other disaster monitoring The Internet of Things industry, such as building walls and subway monitoring, has also been widely applied.

The displacement sensor (commonly known as electronic ruler) of “MIRAN” brand potentiometer has been sold and used in the Chinese market for more than 20 years. After long-term use and verification by a large number of customers, it has generally been well received.

Overall, there are several major advantages: Stable quality, timely supply, comprehensive after-sales service, tracking service and traceability system, continuous improvement

The above points are now described as follows:

I. Stable quality, stable quality requires advanced design, advanced equipment, and advanced manufacturing processes to ensure. Therefore, based on the introduction of advanced foreign technologies, combined with the actual situation and harsh usage environment in China, we continuously improve and perfect the quality and performance of our products. Firstly, the design was optimized to eliminate shortcomings. There are several aspects as follows:

1. The protection level has been improved to enable the product to adapt to the usage environment of Chinese factories, and to enable the electronic ruler to work under conditions close to complex actual factories, adapt to harsh on-site environments, extend its service life, and ensure more reliable and long-term operation of the electronic ruler. Good high temperature resistance, oil resistance and anti-aging resistance.

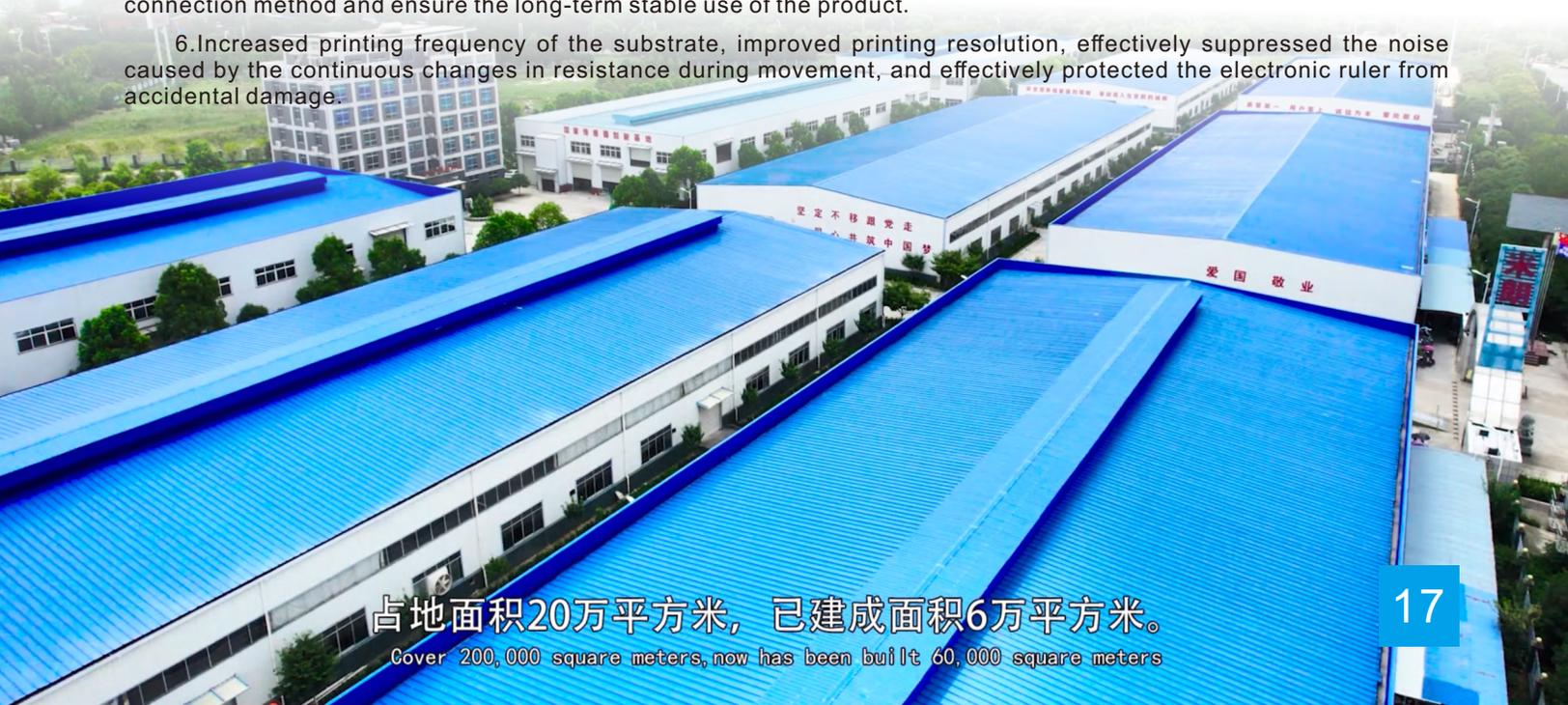
2. Enhanced seismic performance, through strict control of clearances between moving parts and the use of vibration absorbing and oil containing sliding components, the equipment absorbs vibration and maintains stable output, enabling it to work normally for a long time under vibration conditions of the equipment.

3. The tensile strength of the product has been increased. In response to the phenomenon of the product being easily pulled out accidentally during use, the structure of the pull rod clamp spring has been changed to enable the pull rod to withstand an axial tensile force of 75kg, with good buffering margin and structural strength.

4. Increased the reliability of product electrical grounding, enabling the product to resist static electricity, noise, and other adverse electromagnetic radiation interference, without being affected by customer usage habits.

5. We have improved the connection method of input and output lines. In response to the common failure of connection points in some similar products abroad, we have adopted a new (riveting+welding+silver wire) and (insertion and extraction with ultra-high conductivity) connection method to overcome the shortcomings of a single connection method and ensure the long-term stable use of the product.

6. Increased printing frequency of the substrate, improved printing resolution, effectively suppressed the noise caused by the continuous changes in resistance during movement, and effectively protected the electronic ruler from accidental damage.



占地面积20万平方米，已建成面积6万平方米。

Cover 200,000 square meters, now has been built 60,000 square meters

7. Strictly control the design, manufacturing system, and process, strictly follow scientific methods, design to high standards, and repeatedly demonstrate. The selected raw materials are all high-quality products from advanced developed countries. During the manufacturing process, from the procurement of raw materials to the processing of semi-finished products, until the inspection of products upon shipment, all are strictly executed in accordance with the standards established by ISO9001:2008 international quality system.

8. Adopting advanced production equipment to ensure the stability and reliability of process parameters, supplemented by comprehensive testing methods, strict requirements are placed on the thickness, hardness, smoothness, and linearity of the conductive film, ensuring the quality characteristics of the product.

9. Continuously track and serve customers, while providing customers with high-quality services, and go to the site to collect first-hand information about customer usage, improve products accordingly. It can be seen that the launch of "MIRAN" product for more than 20 years is a PDCA cycle process of continuous improvement. We conduct strict verification on all products returned by customers, so it can be inferred that the failure rate of the product within the three-year period is less than 1%. According to the evaluation results of our specialized recycling and replacement, the average time between failures can reach several decades or more. Based on this indicator, our company's products have fully met and exceeded the standards of foreign original imported brands. Moreover, our products have been continuously improved, and all indicators will be further enhanced.

II. Timely supply. In order to consider the needs of customers to the greatest extent possible, our company strongly cooperates with the "zero" inventory management model implemented by customers, setting up offices at the nearest points of customers and setting up warehouses for stocking, maintaining effective inventory in the warehouse, ensuring timely delivery of products to customer sites and gaining customer recognition.

III. Comprehensive after-sales service. Company regards the after-sales service of its products as an extension of product quality, often visiting customer installation sites to discuss and answer their questions, and to solve any problems that may arise during actual use. Even at the request of customers, provide services to end users and solve problems. Because we do not want customers to suffer losses due to misjudgment of faults, and an effective way to reduce misjudgment is to solve the problem on-site. We also hope that as a part of our customer management system, we will be included by customers and regularly notified to understand and solve some on-site problems. And it can solve the problems encountered by customers during use on site, continuously improve, and enhance the overall level of user products.

IV. Due to our closeness to customers, we can better track services and record all products for traceability. Since the company began to popularize the ISO9001:2000 Quality Certification System in August 2006, it has also popularized ISO9001:2008 and ISO9001:2015 Quality System Certification establishes tracking files for semi-finished products and finished products, and enables communication with customers' systems. This is something that so-called foreign brands do not have, and this advantage happens to be the basis for Miran Technology's continuous progress and improvement. We believe that with this foundation, we can learn from other peers.

V. Company not only meets the current needs and product requirements of customers, but also pays more attention to their future requirements for products. The company is currently committed to further improving the development of product vibration resistance, maximum operating speed, and minimum noise. We hope to further meet the configuration requirements of customers for high-end, high-precision, high-speed injection molding machines and other equipment in the future, ensuring that we maintain our advantages in the displacement sensor industry.

Above mainly outlines displacement sensors (electronic rulers) based on the principle of potentiometers. For detailed information, please contact Miran.

Since 2006, Miran has increased research and development investment, devoted itself to research, and successively launched various other sensor products based on different physical principles. The following is a brief introduction to each product series. If you have any requirements, please contact Miran for specific product series catalog samples for selection.



主营产品

Main Product

直线位移传感器 Linear Displacement Sensor



产品简介 Product Introduction

直线位移传感器（别名：电子尺，电阻尺，电位器，位移传感器）原理：电位计原理，所有传感器为位置测量型，用于调节系统（控制系统）和测量系统中，对位移和长度进行直接测量，输出直流电压信号，也可以通过内置或者外置的V/A变送模块将信号转换成标准的0-5V、0-10V或者4-20mA直流信号，也可以远距离传输控制要求。输出位移变化：0-100%给定输入工作电压（随位移变化而变化）。

Linear displacement sensor (another name: electronic ruler, resistance ruler, potentiometer, displacement sensor) principle: potentiometer principle, all sensors for position measurement type, used to adjust the system (control system) and measurement system, direct measurement of displacement and length, output DC voltage signals, can also be through the built-in or external V/A transmitter module to convert signals into standard 0-5V, 0-10V or 4-20mA DC signals. Control requirements can also be transmitted remotely. Output displacement change: 0-100% of the given input operating voltage (varies with displacement).

磁阻式位移传感器 Magnet-Resistant Displacement Sensor



产品简介 Product Introduction

磁阻式位移传感器采用无阻轴设计，密封等级IP67，可满足灰尘或油污较多或潮湿环境或暂时浸没条件下的位移测量需要。磁阻式位移传感器系列产品是基于外部电磁执行器与内部测量游标连接的新型位移测量传感器。通过磁性游标取代传统位移传感器中的阻轴，传感器结构更紧凑。超出理论电气行程后无电气信号变化，安装更简单。

The magnet-resistant displacement sensor adopts a non-resistance shaft design and has a sealing grade of IP67, which can meet the needs of displacement measurement in dusty or oily environments, humid environments or temporary immersion conditions. The magnetoresistive displacement sensor series is a new type of displacement measurement sensor based on the connection between an external electromagnetic actuator and an internal measurement cursor. By replacing the resistance axis in the traditional displacement sensor with a magnetic vernier, the sensor structure is more compact. There is no electrical signal change after exceeding the theoretical electrical stroke, making installation simpler.

无电刷防水防尘位移传感器 Brushless Waterproof and Dustproof Displacement Sensor



产品简介 Product Introduction

无电刷防水防尘位移传感器（非标定制系列）是由两个碳膜基板构成，两者中间中空隔开。碳膜基板上采用丝网印刷先进技术及工艺处理的电位计导电材料，基片正上方的采集碳膜箔片上印有低阻值的采集传感材料；外部位置触点施加的外力让采集膜片传感材料与电位计导电材料相接触，从而产生实时位移信号。专用的丝网印刷涂料以及连续的几道光刻机线性修刻工序，从而保证传感器的线性精度优异、使用寿命长。

The brushless waterproof and dustproof displacement sensor (non-standard customized series) is composed of two carbon film substrates, with a hollow space between them. The potentiometer conductive material is processed by screen printing advanced technology and process on the carbon film substrate. The collection carbon film foil directly above the substrate is printed with low-resistance collection sensing material, the external force exerted by the external position contact makes the collection film the chip sensing material is in contact with the potentiometer's conductive material, thereby generating a real-time displacement signal. Special screen printing coating and several consecutive photolithography machine linear repair processes ensure excellent linear accuracy and long service life of the sensor.

磁致伸缩位移传感器 Magnetostrictive Displacement Sensor



产品简介 Product Introduction

磁致伸缩位移传感器的原理是利用两个不同磁场相交时产生一个应变脉冲信号，然后计算这个信号被探测所需的时间周期，从而换算出准确的位置。这两个磁场一个来自磁环中的永磁铁，另一个来自传感器电子仓中的电子部件产生的激励脉冲。由于输出信号是真正的值，而不是比例的或需要再放大处理的信号，所以不存在信号漂移或变值的情况，更不必像其他传感器那样需要定期重标。

The principle of magnetostrictive displacement sensor is to generate a strain pulse signal when two different magnetic fields intersect, and then calculate the time period required for this signal to be detected, so as to convert the accurate position. The two magnetic fields, one from the permanent magnet in the magnetic ring, and the other from the excitation pulse generated by the electronic components in the sensor's electronic compartment. Since the output signal is a true value, rather than a proportional or reamplified signal, there is no signal drift or variation, let alone the need to periodically re-calibrate as with other sensors.

矿用本安磁致伸缩位移传感器 Intrinsically Safe Mining Magnetostrictive Displacement Sensor



产品简介 Product Introduction

矿用本安位移传感器基于磁致伸缩原理，电子仓内电子部件产生的激励脉冲，沿磁致伸缩材料制成的波导丝以声速传播，与磁环中永磁铁的磁场相交后，波导丝因磁致伸缩现象产生应变脉冲。该脉冲被感测电路探测，通过激励与探测的时间差和声速精准换算位置，测量过程连续且响应迅速，输出绝对值信号无漂移。传感器为非接触式、永不磨损，兼具高分辨率、高精度等优势，无需重标与定期维护。

The mining displacement sensor is based on the magnetostrictive principle. Excitation pulses generated by the electronic components in the electronic chamber propagate along a waveguide wire made of magnetostrictive material at the speed of sound. After intersecting with the magnetic field of the permanent magnet in the magnetic ring, the waveguide wire produces strain pulses due to the magnetostrictive effect. These pulses are detected by the sensing circuit, and the position is accurately calculated using the time difference between excitation and detection along with the speed of sound. The measurement process is continuous and responds quickly, outputting an absolute value signal without drift. The sensor is non-contact, will never wear out, and combines advantages such as high resolution and high accuracy, requiring no recalibration or regular maintenance.

拉绳/线式位移传感器 Rope/Pull Wire Displacement Sensor



产品简介 Product Introduction

拉线位移传感器，又称拉绳编码器，拉绳尺，拉线编码器，拉绳位移传感器，是直线位移传感器在结构上的精巧集成，充分结合了角度传感器和直线位移传感器的优点，成为一款结构紧凑、测量行程长、具有高精度测量的优良传感器。拉线位移传感器系列产品具有很大的选择空间，具有模拟信号4-20mA、0-5V、0-10V和脉冲信号A、B、Z相数字输出，RS485数字信号输出。满足大行程、高精度、信号多样、防水、防爆等需求。

Pull wire displacement sensor, also known as pull wire encoder, pull wire rule, pull wire encoder, pull wire displacement sensor. It is the exquisite integration of linear displacement sensor in structure. Fully combining the advantages of angle sensor and linear displacement sensor, becoming an excellent sensor with compact structure, measuring stroke and high precision measurement. Pull wire displacement sensor series products have a lot of choices of output signals. Analog output signal 4-20mA, 0-5V, 0-10V and pulse output signal A, B, Z phase output, digital output signal RS485 can meet the needs of large stroke, high precision and various signal request.

投入式液位传感器 Submersible level sensor



产品简介 Product Introduction

投入式液位传感器前端防护帽起保护传感器膜片的作用，也能使液体流畅地接触到膜片，防水导线与外壳密封连接，通气管在电缆内与外界相连，内部结构防结露设计。内置微型信号处理电路，可进行远程传输。具有良好的稳定性和可靠性。可广泛应用于水厂、污水处理厂、城市供水、高楼水池、水井、地热井、矿井、工业水池、油池、水文地质、水库、河流、海洋等领域的液位测量控制。

The protective cap at the front end of the submersible level sensor protects the sensor diaphragm and allows liquid to smoothly contact the diaphragm. The waterproof wires are sealed with the housing, and the vent tube inside the cable is connected to the outside. The internal structure is designed to prevent condensation. It features a built-in miniature signal processing circuit that enables remote transmission. It has good stability and reliability. It can be widely used in level measurement and control in water plants, wastewater treatment plants, urban water supply, high-rise water tanks, wells, geothermal wells, mines, industrial water tanks, oil tanks, hydrogeology, reservoirs, rivers, oceans, and other fields.

水利工程闸门位移传感器系列 Hydraulic Engineering Gate Displacement Sensor



产品简介 Product Introduction

MKD闸门开度（霍尔磁栅）位移传感器是米朗科技闸门开度仪系列产品的品种之一，闸门开度（霍尔磁栅）位移传感器为外置式安装，该传感器主要由霍尔传感器、测量杆构成。霍尔传感器长1300mm，配有导向套管，电缆由后部引出，导向套管利用抱箍式安装座固定安装在油缸上；测量杆装在导向套管内，其长度略大于测量行程，测量杆前端有万向关节轴承与安装在油缸前端吊耳上的测量杆连接抱箍连接，随着油缸伸缩运动，测量杆也对应在导向套管内伸缩移动，霍尔传感器感应到闸门开度信号。

MKD gate opening (Hall magnetic grating) displacement sensor is one of the varieties of Miran Technology's gate opening meter series products. The gate opening (Hall magnetic grating) displacement sensor is installed externally. The sensor is mainly composed of a Hall sensor and a measuring rod. The Hall sensor is 1300mm long and is equipped with a guide sleeve. The cable is led out from the rear. The guide sleeve is fixed on the cylinder using a clamp-type mounting seat; the measuring rod is installed in the guide sleeve, and its length is slightly longer than the measuring stroke. The front of the measuring rod has a universal joint bearing and is connected to the measuring rod connection clamp installed on the front end of the cylinder. As the cylinder moves, the measuring rod also moves in the guide sleeve accordingly, and the Hall sensor senses the gate opening signal.

LVDT差动变压式位移传感器 Differential Variable Pressure LVDT Displacement Sensor



产品简介 Product Introduction

差动变压器式位移传感器 (LVDT) 具有优良的性能, 适用于质量控制和计量应用中的高精度, 高重复性的测量。测头采用高硬度的耐磨材料氮化硅陶瓷, 测轴移动部分采用精密导轨。LVDT位移传感器外配变送器可输出标准的直流信号, 采用方便单电源+12 ~ 30V DC供电, 输出信号为标准的可被计算机或PLC使用的0-5V, 0-10V, 4-20mA或RS485输出。

Differential transformer displacement sensor (LVDT) have excellent performance and are suitable for high precision, high repeatability measurements in quality control and metrology applications. The probe is made of silicon nitride ceramic with high hardness and wear-resistant material, and the moving part of the measuring shaft is made of precision guide rail. LVDT displacement sensor external transmitter can output standard DC signal, using a convenient single power supply +12 ~ 30V DC power supply, the output signal have 0-5V, 0-10V, 4-20mA or RS485 output that can be used by a computer or PLC.

电涡流位移传感器 Eddy Current Displacement Sensor



产品简介 Product Introduction

电涡流直线位移传感器系统的工作原理是电涡流效应, 属于一种电感式测量原理。电涡流效应源自振荡电路的能量。而电涡流需要在可导电的材料内才可以形成。传感器探头连接到控制器后, 控制器可以从传感器探头内获得电压值的变化量, 并以此为依据, 计算出对应的距离值, 电涡流测量原理可以测量所有导电材料。由于电涡流可以穿透绝缘体, 即使表面覆盖有绝缘体的金属材料, 也可以作为电涡流传感器的被测物体。独特的圈式绕组设计在实现传感器外形精良紧凑的同时, 可以满足其运转于高温测量环境的要求。

The working principle of eddy current linear displacement sensor system is eddy current effect, which belongs to an inductive measurement principle. The eddy current effect results from the energy of the oscillating circuit. Eddy currents need to be formed in a material that conducts electricity. After the sensor probe is connected to the controller, the controller can obtain the change of voltage value from the sensor probe and calculate the corresponding distance value based on it. The eddy current measurement principle can measure all conductive materials. Because the eddy current can penetrate the insulator, even if the surface is covered with the insulator metal material, it can also be used as the measured object of the eddy current sensor. The unique coil winding design can meet the requirements of operating in the high temperature measurement environment while realizing the excellent and compact shape of the sensor.

超声波位移传感器 Ultrasonic Displacement Sensor



产品简介 Product Introduction

超声波位移传感器是一种振动频率高于声波的机械波，由换能晶片在电压的激励下发生振动，利用超声波的特性研制而成的传感器。它具有频率高、波长短、绕射现象小，特别是方向性好、能够成为射线而定向传播等特点。超声波位移传感器到障碍物的距离 $S=vt/2$ 。根据超声波发射和接收之间的飞行时间原理进行测量，利用声波介质对被检测物进行非接触式无磨损的检测，对透明或有色物体，金属或非金属物体，固体、液体、粉状物质均能检测。

Ultrasonic displacement sensor is a kind of mechanical wave whose vibration frequency is higher than that of sound wave. It is developed by using the characteristics of ultrasonic wave and vibrates under the excitation of voltage. It has the characteristics of high frequency, short wavelength, small diffraction phenomenon, especially good directivity, and can become a ray and directional propagation. Distance from ultrasonic displacement sensor to obstacle $S=vt/2$. According to the principle of time of flight between ultrasonic transmission and reception, the acoustic medium is used for non-contact non-wear detection of the detected object, transparent or colored objects, metal or non-metal objects, solid, liquid, powder substances can be detected.

雷达物位计 Radar Level Meter

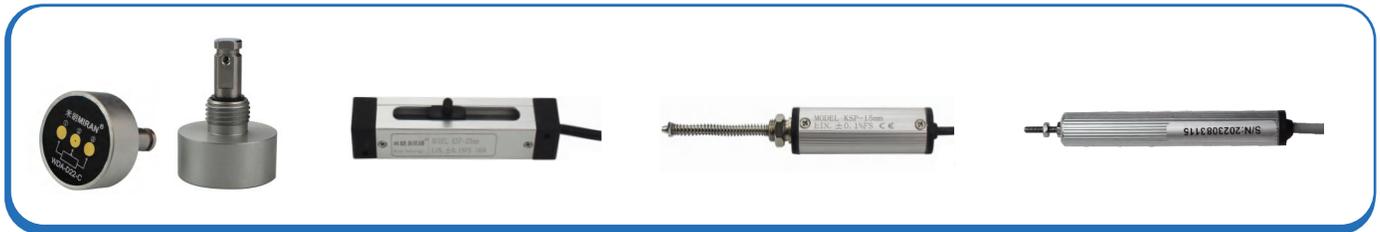


产品简介 Product Introduction

米朗科技MLD-30M系列传感器是26GHz高频雷达式物位测量计，测量距离可达30米。MLD-40M系列传感器则是80GHz高频雷达式物位测量计，测量距离可达40米。如需更长的测量距离，可以联系我们定制。天线被进一步优化处理，新型快速的微处理器可以进行更高速率的信号分析处理，雷达物位计可用于河道、湖泊、浅滩、固体料、过程容器或强粉尘、易结晶/露场合反应釜等一些复杂的测量条件。雷达物位天线发射较窄的微波脉冲，经天线向下传输。微波接触到被测介质表面后被反射回来再次被天线系统接收，将信号传输给电子线路部分自动转换成物位信号。

Miran Technology MLD-30M series sensors are 26GHz high frequency radar level gauges with measuring distances up to 30 meters. The MLD-40M series sensors are 80GHz high frequency radar-type level meters, measuring distances up to 40 meters. If you need a longer measuring distance, you can contact us to customize. Antennas are further optimized, new fast microprocessors allow for higher rate signal analysis and processing, and radar level meters can be used for complex measurement conditions such as river channels, lakes, shoals, solid materials, process vessels or reactors with strong dust and easy crystallization/exposure. The radar level antenna transmits a narrow microwave pulse down through the antenna. After the microwave touches the surface of the measured medium, it is reflected back to be received by the antenna system again, and the signal is transmitted to the electronic circuit part and automatically converted into the level signal.

智能阀门专用（角度/直线）位置传感器 Intelligent Valve Dedicated (Angle/Linear) Position Sensor



产品简介 Product introduction

米朗科技推出整合工业等级的智能阀门专用（角度/直线）位置传感器，以及工业物联网科技而推出的智能阀门监测解决方案，可协助工厂节约资本支出与营运支出、简化建置程序缩短时程、提升作业效率、保持程序最佳化，且成本仅需传统改良监测解决方案的10%。智能阀门专用（角度/直线）位置传感器原理：电位计原理，所有传感器为位置测量型，用于调节系统（控制系统）和测量系统中，对位移和长度或者角度进行直接测量。

Miran Technology launches a smart valve monitoring solution that integrates industrial-grade smart valve-specific (angular/linear) position sensors and industrial IOT Technology, which can help factories save capital and operating expenses, simplify the construction process and shorten the time, improve work efficiency, keep procedures optimized, and cost only 10% of traditional improved monitoring solutions. Principle of dedicated (angular/linear) position sensor for intelligent valves: potentiometer principle. All sensors are position measurement types and are used in regulating systems (control systems) and measurement systems to directly measure displacement, length or angle.

电感调频式位移传感器 Inductive Frequency Modulated Displacement Sensor



产品简介 Product Introduction

电感调频式位移传感器可广泛应用于国防工程科学试验，工程勘测设计土工试验和原位测试走向各种行业和工业自动化与测控技术领域。电感调频式位移传感器具有优良的性能，采用方便的单电源12V DC供电，电子电路密封在304不锈钢金属管内，具备防水，防腐，防爆性能。工作可靠，因结构简单紧凑，封装严密，既抗震又耐潮，特别适合于恶劣环境下使用。

Inductive frequency modulated displacement sensors can be widely used in national defense engineering scientific tests, engineering survey and design geotechnical tests and in-situ tests to various industries and industrial automation and measurement and control technology fields. The inductive frequency modulated displacement sensor has excellent performance and is powered by a convenient single power supply of 12V DC. The electronic circuit is sealed in a 304 stainless steel metal tube and has waterproof, anti-corrosion and explosion-proof properties. It works reliably. Due to its simple and compact structure, tight packaging, and resistance to earthquakes and moisture, it is especially suitable for use in harsh environments.

间隙传感器 Gap Sensor



产品简介 Product Introduction

米朗科技间隙传感器可以测量两个物体之间的间隙或距离。它的原理是利用差动变压器式位移传感器（LVDT）原理，通过测量铁芯在线圈中位置变化来确定两个物体之间的间隙或距离。间隙传感器特点：测量范围大，分辨率高，重复性好，内置线圈无滑动触点，使用寿命长，外配变送器可输出信号 4-20mA，0-5V、0-10V、±5V、±10V、RS485。

Miran Technology Gap sensors measure the gap or distance between two objects. Its principle is to use the differential transformer type displacement sensor (LVDT) principle to determine the gap or distance between two objects by measuring the position change of the iron core in the coil. Gap sensor features: large measuring range, high resolution, good repeatability, built-in coil without sliding contact, long service life, external transmitter can output signal 4-20mA, 0-5V, 0-10V, ±5V, ±10V, RS485.

磁感应直线位移传感器 Magnetic induction linear displacement sensor



产品简介 Product Introduction

磁感应直线位移传感器为非接触式，永不磨损。具有高分辨率、高精度、高稳定性、高可靠性、响应时间快、工作寿命长等优点。通过内部处理电路输出不同的模拟量或数字量信号，输出信号的大小值与实际位移距离呈正比例线性关系。该系列以高可靠性、低维护成本和环境适应性，成为复杂工业场景中位移测量的优选解决方案。

The magnetic induction linear displacement sensor is non-contact and never wears out. It features high resolution, high precision, high stability, high reliability, fast response time, and long service life. Through internal processing circuits, it outputs different analog or digital signals, and the magnitude of the output signal is linearly proportional to the actual displacement distance. This series, with its high reliability, low maintenance cost, and adaptability to various environments, has become the preferred solution for displacement measurement in complex industrial scenarios.

振弦式位移传感器 Vibrating String Displacement Sensor



产品简介 Product introduction

振弦式裂缝计是目前国内外普遍重视和广泛应用的一种非电量电测的传感器。它包括经过热处理的振弦检测元件，一端与振弦连接，另一端与滑动拉杆相连的消除了应力的弹簧构成。随着滑动拉杆的拉动，弹簧开始伸长并引起振弦张力的增加，钢弦的振动频率也随之产生改变，张力与弹簧的伸长成正比。因此位移的变化可以通过测量钢弦的张力即钢弦的振动频率变化来实现。由于振弦传感器直接输出振弦的自振频率信号，因此，具有抗干扰能力强、受电参数影响小、零点飘移小、受温度影响小、性能稳定可靠、耐震动、寿命长等特点。

Vibrating string crack meter is a kind of non-electric measuring sensor which is widely used at home and abroad. It comprises a heat-treated vibrating string detection element, a stress-relieved spring connected to the vibrating string at one end and a sliding tie rod at the other end. With the pull of the sliding rod, the spring begins to extend and cause the increase of the tension of the vibrating string, the vibration frequency of the steel string also changes, and the tension is proportional to the elongation of the spring. Therefore, the change of displacement can be achieved by measuring the tension of the steel string, that is, the change in the vibration frequency of the steel string. Because the vibration string sensor directly outputs the vibration frequency signal of the vibration string, it has the characteristics of strong anti-interference ability, small influence by electrical parameters, small zero drift, small influence by temperature, stable and reliable performance, vibration resistance, long life and so on.

振弦式采集模块 Vibrating Wire Acquisition Module



产品简介 Product introduction

RS485振弦传感器采集卡模块，可实现将振弦传感器的自振频率信号转化为位移量通过RS485经MODBUS-RTU协议输出，通过串口指令来实现用户对不同振弦传感器标定的功能。用户完成温度系数、直线系数、起始点、温度标定操作后，根据标定系数实现线性输出，标定之外的部分视为死区。隔离电源防干扰，更安全。振弦采集卡与振弦传感器配套使用，可随时更换不同量程的振弦传感器进行标定使用。

The RS485 vibrating wire sensor acquisition card module can convert the natural frequency signal of the vibrating wire sensor into displacement and output it via RS485 using the MODBUS-RTU protocol. Users can perform calibration of different vibrating wire sensors through serial commands. After completing temperature coefficient, linear coefficient, starting point, and temperature calibration operations, the module provides linear output based on the calibration coefficients, with portions outside the calibration considered as dead zones. The isolated power supply prevents interference for increased safety. The vibrating wire acquisition card is used in conjunction with vibrating wire sensors, allowing users to easily replace sensors with different measurement ranges for calibration purposes.

振弦式渗压计 Vibrating wire piezometer



产品简介 Product introduction

MLSYJ-XX 振弦式渗压计又称孔隙水压力计，是一种既可监测地下水位，也可同时测量埋设点温度的压力传感器；其性能稳定，灵敏度高，体积小等，整体采用不锈钢外壳，坚固美观。主用于自动化监测，加装配套附件即可在测压管、地基钻孔等场合使用。采用进口钢弦，温度性能稳定，使用寿命长，产品一致性好；内置智能温度传感器，便于进行温度补偿，提高监测数据准确性和可靠性；采用IP68，标准设计，防水性能优异；使用标准水工电缆，系统更加可靠。

The MLSYJ-XX vibrating wire piezometer, also known as a pore water pressure gauge, is a pressure sensor that can monitor groundwater levels and simultaneously measure the temperature at the installation point. It features stable performance, high sensitivity, small size, and a robust and aesthetically pleasing stainless steel housing. It is mainly used for automated monitoring and can be employed in pressure pipes, foundation boreholes, and other scenarios with the addition of suitable accessories. Using imported steel wires, it offers stable temperature performance, long service life, and good product consistency. The built-in intelligent temperature sensor facilitates temperature compensation, enhancing the accuracy and reliability of monitoring data. It is designed to IP68 standards, providing excellent waterproof performance, and uses standard hydropower cables for improved system reliability.

三滑轮张力传感器 Triple Pulley Tension Sensor



产品简介 Product Introduction

米朗科技张力传感器采用应变片在传感器内部组成惠斯通电桥，传感器在受到外力作用时会产生形变，引起紧贴在传感器内部的应变片阻抗成线性的增加或者减小。通过变送器可将力学量转换成标准的4-20mA，0-5V，0-10V等模拟信号直接与自动控制设备PLC或计算机等连接。米朗科技张力传感器采用合金钢材质，稳定性高，安装方便，信号稳定抗干扰，可安装不同规格滑轮。广泛应用于光纤、纱线、电缆、胶带等各类线材生产设备，用于张力的动态测量。

Miran Technology tension sensor uses a strain gauge to form a wheatstone bridge inside the sensor. When the sensor is subjected to external force, it will deform, causing the strain gauge impedance close to the sensor inside to linearly increase or decrease. Through the transmitter, the mechanical quantity can be converted into the standard 4-20mA, 0-5V, 0-10V and other analog signals directly connected with the automatic control equipment PLC or computer. Miran technology tension sensor adopts alloy steel material, high stability, easy installation, signal stability and anti-interference, can install different specifications pulley. Widely used in fiber, yarn, cable, tape and other wire production equipment, for dynamic tension measurement.

固定式测斜传感器/智能测斜仪 Fixed Inclinometer Sensor/Intelligent Inclinometer



产品简介 Product Introduction

固定式测斜传感器/智能测斜仪是本公司基于高精度六轴传感器结合单片机嵌入式系统研发的一款固定式倾角测量仪。用以观测边坡、基坑，铁路等相对水平的双轴倾斜角度，配合自动实时监测系统也可适合于滑坡地质活动的长期监测。钻孔的多级设置，可以测量每个深度的倾角，将倾角进行位移换算，适用于常规测量方式难以观测到的隐蔽部位的形变量。固定式测斜传感器/智能测斜仪内部由电子仓部分（高精度角度敏感元件及芯片组），以及外部不锈钢组件，滑轮组件等构成。

Fixed inclinometer/intelligent inclinometer is a fixed inclinometer developed by our company based on high-precision six-axis sensor combined with MCU embedded system. It can be used to observe the relative horizontal biaxial tilt angle of slope, foundation pit, railway, etc. With automatic real-time monitoring system, it can also be suitable for long-term monitoring of landslide geological activities. The multi-stage setting of the drilling hole can measure the inclination angle of each depth, and convert the inclination angle to the displacement, which is suitable for the shape variable of the hidden part that is difficult to be observed by the conventional measurement method. The fixed inclinometer/intelligent inclinometer is composed of an electronic compartment (high-precision angle sensor and chipset), an external stainless steel component, and a pulley assembly.

静力水准仪 Static Level



产品简介 Product Introduction

磁致伸缩式静力水准仪是一种高精密度液位测量仪器，由一个高精度的磁致伸缩液位计加上储液罐，液位浮球，排气阀，调平支架，水管等部件构成。在使用中，多个静力水准仪的容器用通液管联接，每一容器的液位由相关传感器测出，进而可测出各测点的液位变化量。磁致伸缩式静力水准仪用于测量基础和建筑物各个测点的相对沉降的精密仪器，广泛应用于大坝、高层建筑物、核电站、水利枢纽、岩体、管道、路基、路堑、桥梁、隧道、地铁、大型储罐等结构物的不均匀沉降自动化监测。

Magnetostrictive static level is a kind of high precision liquid level measuring instrument, which is composed of a high-precision magnetostrictive level meter, liquid storage tank, liquid level float, exhaust valve, leveling bracket, water pipe and other components. In use, the containers of a plurality of static level instruments are connected with liquid pipes, and the liquid level of each container is measured by the relevant sensor, so that the liquid level change of each measuring point can be measured. Magnetostrictive static level is a precision instrument used to measure the relative settlement of each measuring point of foundation and building. It is widely used in the automatic monitoring of uneven settlement of DAMS, high-rise buildings, nuclear power plants, water control centers, rock masses, pipelines, roadbeds, cuts, bridges, tunnels, subways, large storage tanks and other structures.

磁栅尺 Magnetic Grating Scale



产品简介 Product Introduction

磁栅尺是根据磁感应的原理进行工作。当读磁头在磁尺的磁场空间中做直线运动时，读磁头会根据运动的相关位移量实时输出符合标准的位置脉冲。MSK滑块式磁栅尺本产品主要用于木工、石材加工、锯切、金属切削、纺织、印刷、包装、塑料加工、自动化系统、切割设备、电子组装设备、测量/检测设备等。产品优势：非接触、高速测量；高分辨率；内置LED状态指示灯；极强的抗污和抗油能力；简易的安装方式。

The magnetic grid ruler works according to the principle of magnetic induction. When the read head makes a linear motion in the magnetic field space of the magnetic scale, the read head will output a standard position pulse in real time based on the relevant displacement of the movement. Magnetic railing ruler is mainly used in woodworking, stone processing, sawing, metal cutting, textile, printing, packaging, plastic processing, automation systems, cutting equipment, electronic assembly equipment, measuring/testing equipment, etc. Product advantages: non-contact, high-speed measurement, high resolution, built-in LED status indicator, strong anti-fouling and oil resistance, simple installation method.

轮辐式称重传感器 Spoke Load Cell Sensor



产品简介 Product Introduction

米朗科技轮辐式称重传感器采用应变片在传感器内部组成惠斯通电桥，传感器在受到外力作用时会产生形变，引起紧贴传感器内部的应变片阻抗成线性的增加或者减小。通过匹配的变送器模块，可将力学量转换成标准的4-20mA，0-5V，0-10V等模拟信号直接与自动控制设备PLC或计算机等连接。轮辐式称重传感器采用合金钢表面镀镍，轮辐式弹性体拉式结构，具有低外形、抗偏载、精度高、强度好、安装方便、拉压输出对称性好等特点。

Miran Technology spoke load cell sensor uses strain gauge to form wheatstone bridge inside the sensor. When the sensor is subjected to external force, it will deform, resulting in a linear increase or decrease of the strain gauge impedance close to the sensor. Through the matching transmitter module, the mechanical quantity can be converted into the standard 4-20mA, 0-5V, 0-10V and other analog signals directly connected with the automatic control equipment PLC or computer. The spoke type weighing sensor adopts alloy steel surface nickel-plated, spoke type elastic body pull structure, has the characteristics of low profile, anti-biased load, high precision, good strength, easy installation, good tension output symmetry and so on.

角度位置传感器 Angular Position Sensor



产品简介 Product Introduction

米朗科技角度（单圈/多圈）位置传感器分为电阻型、中空轴型、霍尔型、磁感应型、防水型、防水防爆型等多种类型，工作方式有增量型或绝对值型，米朗科技角度位置传感器，具有无触点、长寿命、高分辨、高频响、低温漂、优线性、耐振抗冲、抗干扰等特点。广泛应用于水、油、气、振动、冲击等多种恶劣工业环境中。是替代光学编码器、旋转变压器、导电塑料电位器的理想产品；360度以内的角度可以任意定制，如90度、180度、200度等均可生产，也可做多圈绝对值型。支持0-5V,0-10V,4-20mA,RS485等多种信号输出。

Miran Technology angle (single turn/multi-turn) position sensor is divided into resistance type, hollow shaft type, Hall type, magnetic induction type, waterproof type, waterproof explosion-proof type and many other types, The working methods can be made with incremental and absolute type, Miran Technology angle position sensor, with no contact, long life, high resolution, high frequency noise, low temperature drift, excellent linearity, vibration resistance, anti-interference and other characteristics. Widely used in water, oil, gas, vibration, shock and other harsh industrial environment. It is the ideal product to replace optical encoder, rotary transformer and conductive plastic potentiometer. The angle within 360 degrees can be arbitrarily customized. It can also be made with a multi-ring absolute value type. Support 0-5V, 0-10V, 4-20mA, RS485 and other signal output.

静态倾角传感器 Static Tilt Sensor



产品简介 Product Introduction

MQJ系列高精度数字输出型静态倾角传感器，分辨力可达 0.01° ，该倾角传感器内部采用高分辨力差分模转换器，内置自动温度补偿和滤波算法，减小了因环境变化引起的误差。测量原理是把静态重力场的变化转换成倾角变化，通过数字方式或者模拟方式直接输出当前的姿态角。外壳采用锌合金压铸成型，机械强度高，温度膨胀系数小，密封性能高，安装方便、使用简单、体积小、抗外界电磁干扰、承受振动冲击能力强。

MQJ series high-precision digital output static inclination sensor, resolution up to 0.01° , the inclination sensor internal resolution differential digital-to-analog converter, built-in automatic temperature compensation and filtering algorithm, reduce the error caused by environmental changes. The measurement principle is to convert the change of static gravity field into the change of inclination Angle, and directly output the current attitude Angle through digital or analog mode. The shell is made of zinc alloy die-casting, high mechanical strength, low temperature expansion coefficient, high sealing performance, easy installation, simple use, small size, anti-external electromagnetic interference, strong ability to withstand vibration and impact.

动态倾角传感器 Dynamic Tilt Sensor



产品简介 Product Introduction

MDTQJ系列动态倾角传感器（别名：六轴倾角传感器、姿态传感器）传感器内部使用数字型MEMS动态芯片，可测量运动载体的姿态参数（横滚、俯仰以及方位角），适用于运动或振动状态下的倾角测量。产品内置加速度和陀螺传感器，集成了卡尔曼滤波算法，从而可测量运动或振动状态下的载体实时运动数据。产品RS485/232/TTL等信号输出模式可选，扩展性强。六轴动态倾角传感器采用非接触式测量，能实时输出当前的姿态倾角。该产品属于动静双模测量传感器，抗外界电磁干扰能力强，适用各类大型高强度冲击振动工业环境。

The MDTQJ series dynamic inclination sensor (alias: six-axis inclination sensor, attitude sensor) uses a digital MEMS dynamic chip inside the sensor, which can measure the attitude parameters (roll, pitch and azimuth) of the moving carrier, and is suitable for inclination measurement in motion or vibration state. The product has built-in acceleration and gyroscope sensors, and integrates the Kalman filter algorithm, so that the real-time motion data of the carrier in motion or vibration state can be measured. The product has optional RS485/232/TTL signal output modes and strong scalability. The six-axis dynamic inclination sensor adopts non-contact measurement and can output the current attitude inclination in real time. This product is a dynamic and static dual-mode measurement sensor with strong resistance to external electromagnetic interference, and is suitable for various large-scale high-intensity impact and vibration industrial environments.

无线传输模块/无线倾角传感器 Wireless Transmission Module/Wireless Inclinator



产品简介 Product Introduction

米朗科技无线传输模块W1是一款高性能、低功耗、远距离的微功率射频无线数据收发电台，不改变用户的任何数据和协议，采用半双工透明传输机制，实现无线代替的功能。无线数传电台的射频芯片基于扩频跳频技术，在稳定性、抗干扰能力以及接收灵敏度上都超越现有的GFSK电台。用户可以通过我司配置的上位机软件根据实际需求灵活配置电台的工作频率、串口速率等参数。无线倾角传感器将倾角传感器与无线传输模块的功能结合在一起，操作简单，使用方便。

Miran wireless transmission module W1 is a high-performance, low-power, long-distance micro-power radio frequency wireless data transceiver station. It does not change any user data and protocols, and uses a half-duplex transparent transmission mechanism to achieve wireless replacement functions. The radio frequency chip of the wireless data transmission radio is based on spread spectrum frequency hopping technology, which surpasses the existing GFSK radio in terms of stability, anti-interference ability and receiving sensitivity. Users can flexibly configure the working frequency, serial port rate and other parameters of the radio station according to actual needs through the host computer software configured by our company. The wireless inclination sensor combines the functions of the inclination sensor and the wireless transmission module, making it simple to operate and easy to use.

注塑机专用压力传感器 pressure sensor used in Injection molding machine industry



产品简介 Product Introduction

PT-719注塑机专用压力变送器采用进口瑞士传感器芯体，外形小巧，安装方便。本产品尤其适合大量程范围使用，具有良好的稳定性，温度范围广，使用寿命超千万次，广泛应用于注塑机，压铸机及各类液压工程机械领域。有CE认证，可直接替代多种同类进口产品，如阿特拉斯（Atlas），MSI，HUBA，Honeywell，Danfoss，杰佛伦等。多种大量程范围和电气输出；结构小巧，方便可靠；超稳技术；高频动态响应；适应于高温环境；长期稳定性好，可以带现场显示和设置开关量报警信号，直观简洁。

PT-719 pressure transmitter for injection molding machine adopts imported Swiss sensor core, with compact appearance and easy installation. This product is particularly suitable for large range use, with good stability, wide temperature range, service life of more than 10 million times, and is widely used in injection molding machines, die casting machines and various hydraulic engineering machinery fields. It has CE certification and can directly replace many similar imported products, such as Atlas, MSI, HUBA, Honeywell, Danfoss, Gefran, etc. A variety of large ranges and electrical outputs; compact structure, convenient and reliable; ultra-stable technology; high-frequency dynamic response; adaptable to high temperature environment; good long-term stability, can be displayed on site and set switch alarm signals, intuitive and concise.

RS485转USB转换器 RS485 to USB Converter



产品简介 Product Introduction

USB转串口芯片是采用CH341T，可以扩展出RS485通讯信号，广泛应用于研发通讯调试、工业自动化控制系统、考勤机、LED显示屏通讯数据、IC卡收费系统、监控数据读写和云台控制、一卡通门禁系统、停车场系统、自动银行系统、公共汽车收费系统、饭堂售饭系统、公路收费站系统等。产品特点：采用目前最新的USB转串口芯片CH341T；USB供电采用了过流保护器件，确保了USB接口的安全；LED电源指示、数据发送指示和接收指示；0.5A自恢复保险；可拔插连接头使用方便。

The USB to serial port chip uses CH341T, which can expand RS485 communication signals and is widely used in research and development of communication debugging, industrial automation control systems, attendance machines, LED display communication data, IC card charging systems, monitoring data reading and writing and PTZ control, one-card access control systems, parking systems, automatic banking systems, bus charging systems, canteen meal selling systems, highway toll station systems, etc. Product features: using the latest USB to serial port chip CH341T; USB power supply uses overcurrent protection devices to ensure the safety of the USB interface; LED power indication, data sending indication and receiving indication; 0.5A self-recovery insurance; pluggable connector for easy use.

位移传感器变送模块 Displacement Sensor Transmission Module



产品简介 Product Introduction

普通的电子尺及拉绳尺，都是电位计原理的位移传感器，实际上就相当于一个电位器，通俗点讲也叫：滑动变阻器，供电多少V电压，输出就是0-多少V电压；如果供电电压只有24V的，但是输出却想要0-5V\0-10V\4-20MA\RS485等其中一种输出信号，那就需要配我们的模块即可。模块可以内置在传感器内部，也可以外置插头模块（限模拟量信号输出）、或单独的铝合金或塑胶壳的模块。米朗科技也提供RS485转模拟量的变送模块供客户选择。

Ordinary electronic rulers and wire rulers are displacement sensors based on the potentiometer principle. They are actually equivalent to a potentiometer. In layman's terms, they are also called sliding rheostat. The output voltage is how many voltage the power supply is. If the power supply voltage is only 24V, but the output wants one of the output signals such as 0-5V/0-10V/4-20MA/RS485, then just need to match our module. The module can be built into the sensor, or it can be an external plug module (limited to analog signal output), or a separate aluminum alloy or plastic shell module. Miran Technology also provides RS485 to analog transmission modules for customers to choose from.

数显仪表 Digital Display Instrument



产品简介 Product Introduction

米朗科技数显仪表可配接电阻尺，电位器。也可以配接模拟量输入的传感器。单6位LED显示，显示范围是-99999~99999。针对电阻尺（电位器）的特点，输入电路做了优化。显示、测量稳定性提高，抗电磁干扰、串模干扰的能力提升。0.05级精度，测控速度每秒5~200次可设置，显示范围-99999~99999。面板按键及开关量输入置位功能。10点折线修正功能。可选配1~4点报警输出。六种基本报警方式和待机上、下限，待机偏差上、下限四种待机报警方式。操作简单，使用方便。

Miran Technology digital display instruments can be equipped with resistance scales and potentiometers. Sensors with analog output can also be connected. Single 6-digit LED display, display range is -99999~99999. For electricity, the characteristics of the resistor (potentiometer) and the input circuit have been optimized. The display and measurement stability are improved, and the ability to resist electromagnetic interference and serial mode interference is improved. 0.05 level accuracy, measurement and control speed per second 5~200 times can be set, display range -99999~99999. Panel buttons and switch input setting function. 10-point polyline correction function. Optional 1~4 points alarm output. There are six basic alarm modes and four standby alarm modes: standby upper and lower limits, and standby deviation upper and lower limits. Simple operation and easy to use.

全自动/半自动润滑油泵 Fully Automatic / Semi-automatic Lubricating Oil Pump



油雾润滑泵
Oil mist lubrication pump



黄油润滑油泵系列
Butter lubricating oil pump



油脂润滑油泵系列
Grease lubrication oil pump



稀油油脂一体泵系列
Thin oil and grease integrated pump

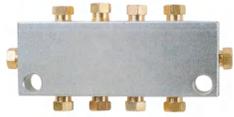


稀油油脂一体泵系列
Thin oil and grease integrated pump



稀油润滑油泵系列
Thin oil lubricating oil pump

油路配件 Oil fittings



LA分配器
LA distributor



LV分配器
LV distributor



LK分配器
LK distributor



LE分配器(铝合金)
LE distributor(Aluminium alloy)



LB分配器
LB distributor



LD分配器
LD distributor



LC分配器
LC distributor



LH/LP分配器
LH/LP distributor

润滑系统分配器 Oil Lubrication System Distributor



固定双接头
Fixed double joint



过滤双接头
Filter double joint



三通管/三通接头
Tee pipe/Tee joint



四通管/四通接头
Four-way pipe/Four-way joint



直通接头
Through joint



单向直接头
Unidirectional direct joint



单向直角接头
Unidirectional right angle joint



反向直角接头
Reverse square joint



直角接头
Right angle connector



套管/密封圈
Casing/seal ring



管内衬/油管衬套
Casing cap/Tubing joint



套管帽/油管接头
Casing cap/tubing joint



螺帽/接头螺母
Nut/sub nut



补芯
Complement core



活动直通接头
Movable through joint



活动直角接头
Movable square joint

润滑附件 Lubrication Accessories



过渡三通
Transition tee



平面直角接头
Flat rectangular joint



孔内三通接头
Hole tee



套管塞头
Casing stopper head



平端塞头
Flat end plug



黄油嘴(铜制)
Grease nipple (copper)



黄油嘴(铁制)
Grease nipple (iron)



内接双通接头
Two-way connection



连接接头
Connector



侧外接三通接头
Lateral external tee joint



宝塔型直接头
Pagoda straight head



宝塔型直角接头
Pagoda-type right angle joint



内牙三通
Inside the thread tee



外牙三通
Outside the thread tee



外牙双通接头
External two-way connector



内牙双通接头
Internal teeth two-way connector



DPM比例式限流杆
DPM proportional restrictor rod



DPJ比例式限流杆
DPJ proportional restrictor rod



MC比例式限流杆
MC proportional restrictor rod



MJ比例式限流杆
MJ proportional restrictor rod

润滑附件
Lubrication Accessories



外钢丝软管
External wire hose



外钢丝护套软管
Hose with outer wire sheath



高压软管
High pressure hose



钢丝弹簧护套
Steel wire spring jacket



胶管
Rubber hose



尼龙管
Nylon pipe



铝管
aluminium tube



镀铜铝管
Copper coated aluminum tube



铜管
Copper pipe

润滑油管
Lubrication Oil Tube

米朗公司自2003年也成立了润滑油泵事业部门，该部门主要生产研发各种自动化机械以及工程车辆用的全自动以及半自动集中润滑油泵系统及其油路配件系统等一系列产品，设计理念引进国内外最新标准，给您的机械设备保驾护航，提供基础润滑服务，保证长期润滑可靠。公司已经成为一家专业的集中润滑系统制造商。

润滑油泵事业部门成立以来，公司引进众多国内外顶尖的行业技术人才，在机械润滑油泵系统行业发力，开发了各类集中润滑油泵系统产品。机械运转离不开传感器，也离不开润滑油，米朗公司的润滑油泵系列产品经过几代更新，现在完全可以满足国内外，各类自动化机械各种润滑方案的需求，产品技术先进，种类丰富，已经处于行业领先地位，已发展为全国知名的机械集中润滑系统专业生产厂家。在大陆创立于2003年初，集中润滑系统产品种类齐全，质量稳定，包含有抵抗式、加压式、容积式、循环式、喷雾式、递进式等干、稀油润滑产品。产品广泛应用于各种切削五金、数控机床、加工中心、冲压、锻造、锻压、纺织、塑料、木工、橡胶、矿山、冶金、电梯、生产线、工程机械、建筑、印刷、食品等各个行业的机械设备的润滑系统及汽车底盘集中润滑系统，公司润滑系统产品已经销往世界各地。

Miran has also established a lubricating oil pump business department in 2003. This department mainly produces and develops a series of products such as fully automatic and semi-automatic centralized lubricating oil pump systems and oil circuit accessories systems for various automated machinery and engineering vehicles. The design concept is introduced the latest standards at home and abroad will protect your mechanical equipment and provide basic lubrication services to ensure long-term lubrication reliability. The company has become a professional manufacturer of centralized lubrication systems.

Since the establishment of the Lubricating Oil Pump Division, the company has introduced many top industry technical talents at home and abroad, worked hard in the mechanical lubricating oil pump system industry, and developed various types of centralized lubrication products. Oil pump system products. Mechanical operation is inseparable from sensors and lubricating oil. After several generations of updates, Miran's lubricating oil pump series products can now fully meet the national requirements. Internally and externally, various types of automated machinery meet the needs of various lubrication solutions. The product technology is advanced and the variety is rich. It is already in the leading position in the industry and has developed into a nationally renowned centralized machinery lubrication company. Professional manufacturer of sliding systems. Founded in mainland China in early 2003, the centralized lubrication system has a complete range of products with stable quality, including resistance type, pressurized type, volumetric type, circulation type, spray type, progressive type and other dry and thin oil lubrication products. Products are widely used in various cutting hardware, CNC machine tools, machining centers, stamping, forging, forging, textiles, plastics, woodworking, rubber lubrication systems for machinery and equipment in mining, metallurgy, elevators, production lines, engineering machinery, construction, printing, food and other industries, as well as centralized lubrication systems for automobile chassis. The company's lubrication system products have been sold all over the world.



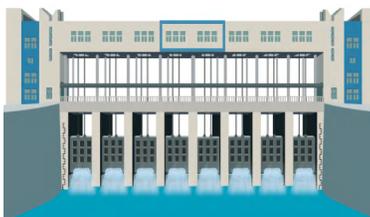
应用案例

Application Case



● 注塑机位移检测

Injection molding machine displacement detection



● 水库液位监测

Reservoir level monitoring



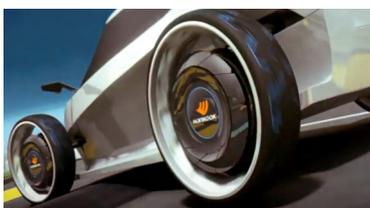
● 桥梁位移监测

Bridge displacement monitoring



● 工业自动化姿态控制

Industrial automation attitude control



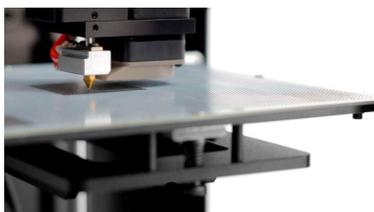
● 汽车轮胎角度测量

Car tire angle measurement



● 轧钢机油缸位置检测

Rolling mill cylinder position detection



● 精密平台自动调平

Precision platform automatic leveling



● 轴径跳动检测

Shaft diameter runout detection



● 车辆制动装置磨损测量

Vehicle brake wear measurement



● 建筑健康监测

Building monitoring



● 倾斜角度监测

Tilt angle monitoring



位移传感器、角度位置传感器应用场所极多，随着核心技术的发展，位移传感器、角度位置传感器得到越来越广泛的应用。适合应用于工厂、山体、铁路、隧道、船业、机械、煤炭、冶金、塑料、化工建筑业、医疗事业、桥梁铺设、水坝建设、汽车行业、核工业、航空航天事业以及科研院校等国民经济各行各业。

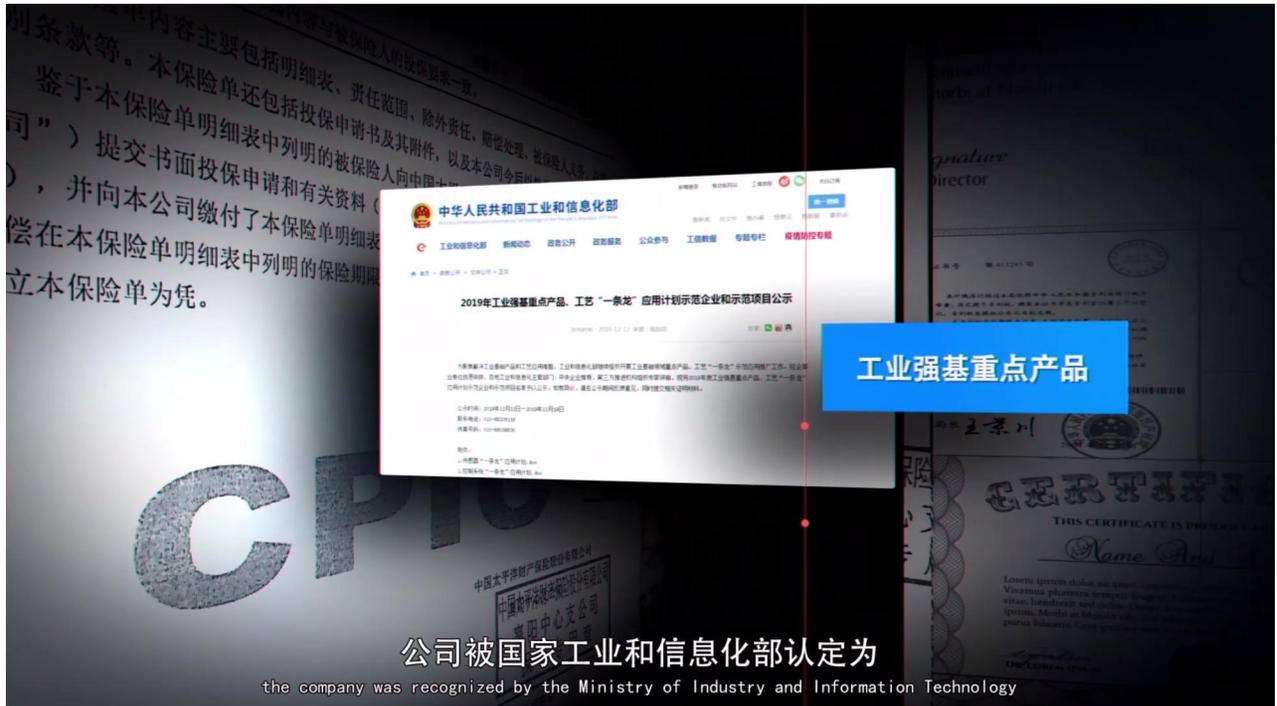
There are many applications for displacement sensors and angle position sensors. With the development of core technology, displacement sensors and angle position sensors are becoming more and more widely used. Suitable for use in factories, mountains, railways, tunnels, shipbuilding, machinery, coal, metallurgy, plastics, chemical construction industry, medical industry, bridge laying, dam construction, all walks of life in the national economy, including the automotive industry, nuclear industry, aerospace industry, and scientific research institutions.

企业资质

Enterprise Qualification

中国工业强基重点产品

Key products to strengthen China's industrial base



中国工信部高精度传感器一条龙应用计划示范项目与企业

China's Ministry of Industry and Information Technology's High-precision Sensor One-stop Application Plan Demonstration Projects and Enterprises

枣阳市知识产权试点企业

Zaoyang Intellectual Property Pilot Enterprise



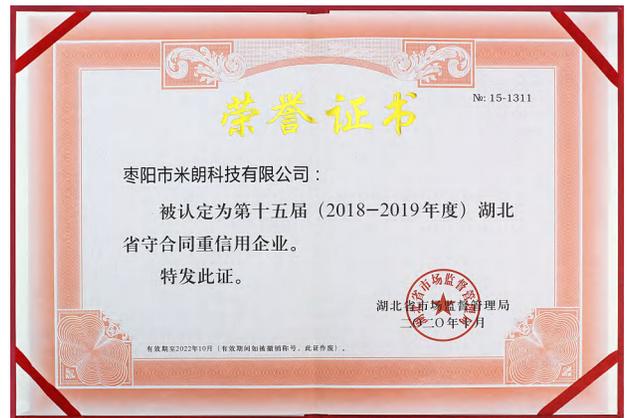
国家级专精特新“小巨人”企业，国家级高新技术企业

National-level Specialized and New “Little Giant” Enterprise, National-level High-tech Enterprise



湖北省支柱产业细分领域隐形冠军培育企业，湖北省守合同重信用企业

Hubei Province Pillar Industry Subdivision Hidden Champion Cultivation Enterprises, Hubei Province's Contract-abiding and Credit-abiding Enterprise



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Hubei Company Website

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