

# MAGNETIC SENSOR SOLUTION EXPERT

磁性传感器解决方案专家

**南京艾驰电子科技有限公司**  
Nanjing AH Electronic Science & Technology Co., Ltd.

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# C O N T E N T S

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## COMPANY PROFILE

### 企业简介

南京艾驰电子科技有限公司是一家集产品设计、应用、生产、销售为一体的高科技企业，位于南京市麒麟科技创新园启迪科技城。公司专注于磁传感器领域产品的深耕和发展，经过多年努力，在霍尔集成电路、零功耗磁传感器及产品应用方面已形成了先进的技术能力，丰富的生产手段，强大的市场销售网络和全覆盖的知识产权体系。

南京艾驰电子科技有限公司拥有完全属于自己的知识产权体系。公司的目标是致力于研制和生产具有中国自主知识产权的磁传感器及其应用产品，打造磁传感器行业知名的民族品牌。

南京艾驰电子科技有限公司是一家集产品设计、应用、生产、销售为一体的高科技企业。

Nanjing AH Electronic Science & Technology Co., Ltd. is a high-tech enterprise that integrates product design, application, production and sales.

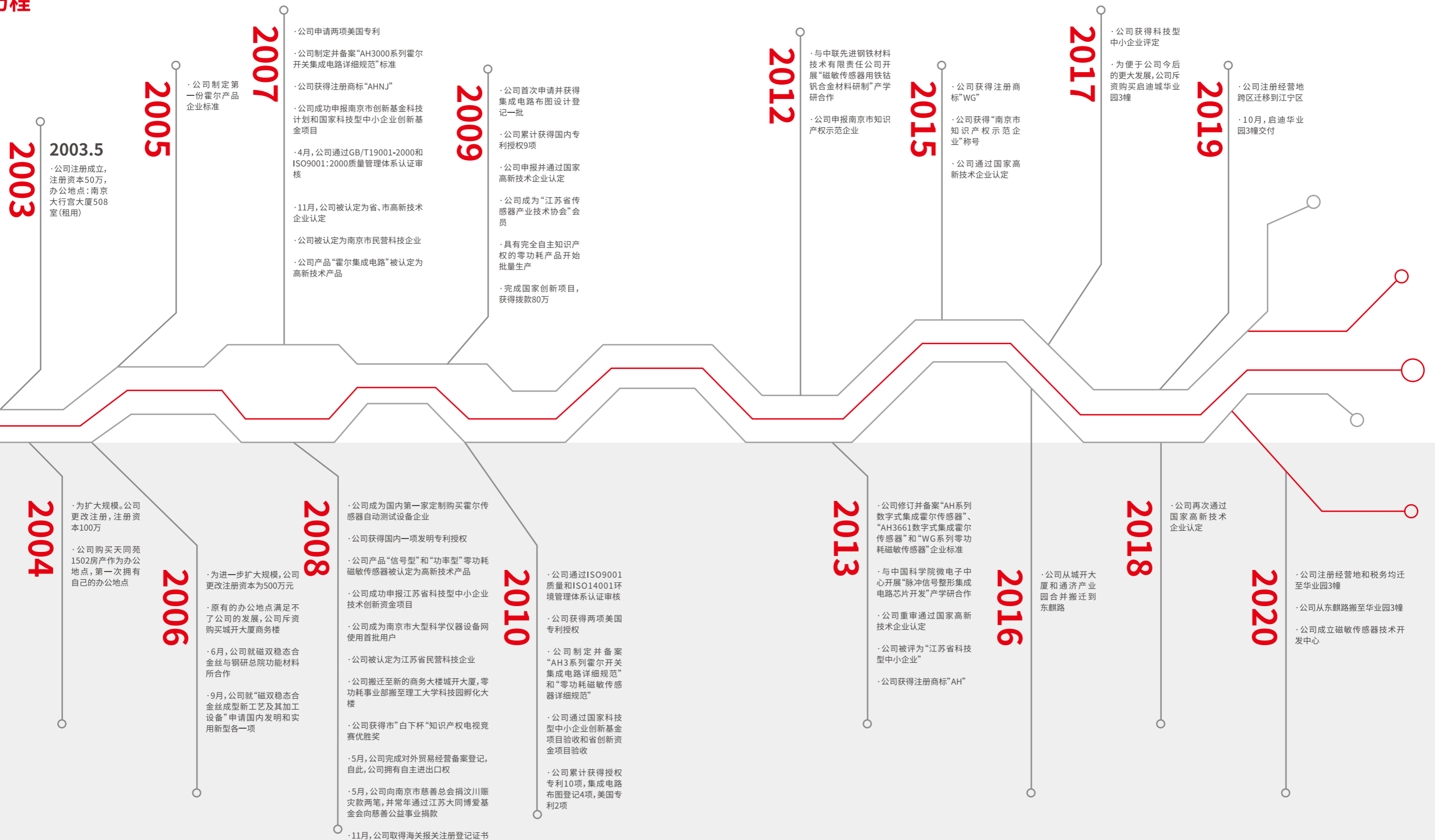


Nanjing AH Electronic Science & Technology Co., Ltd. is a high-tech enterprise that integrates product design, application, production and sales. The company is registered in Qilin Science and Technology Innovation Park in Nanjing, focusing on the research and development of products in the field of magnetic sensors. After years of hard work, the company has managed to possess superb technical capabilities, abundant production methods and a strong market sales network in Hall integrated circuits, zero-power magnetic sensors and their applications.

Nanjing AH Electronic Science & Technology Co., Ltd. has its own intellectual property rights. The company's goal is to develop, produce and sell magnetic sensors and their application products with China's own intellectual property rights, and to build a well-known national brand in the magnetic sensor industry.

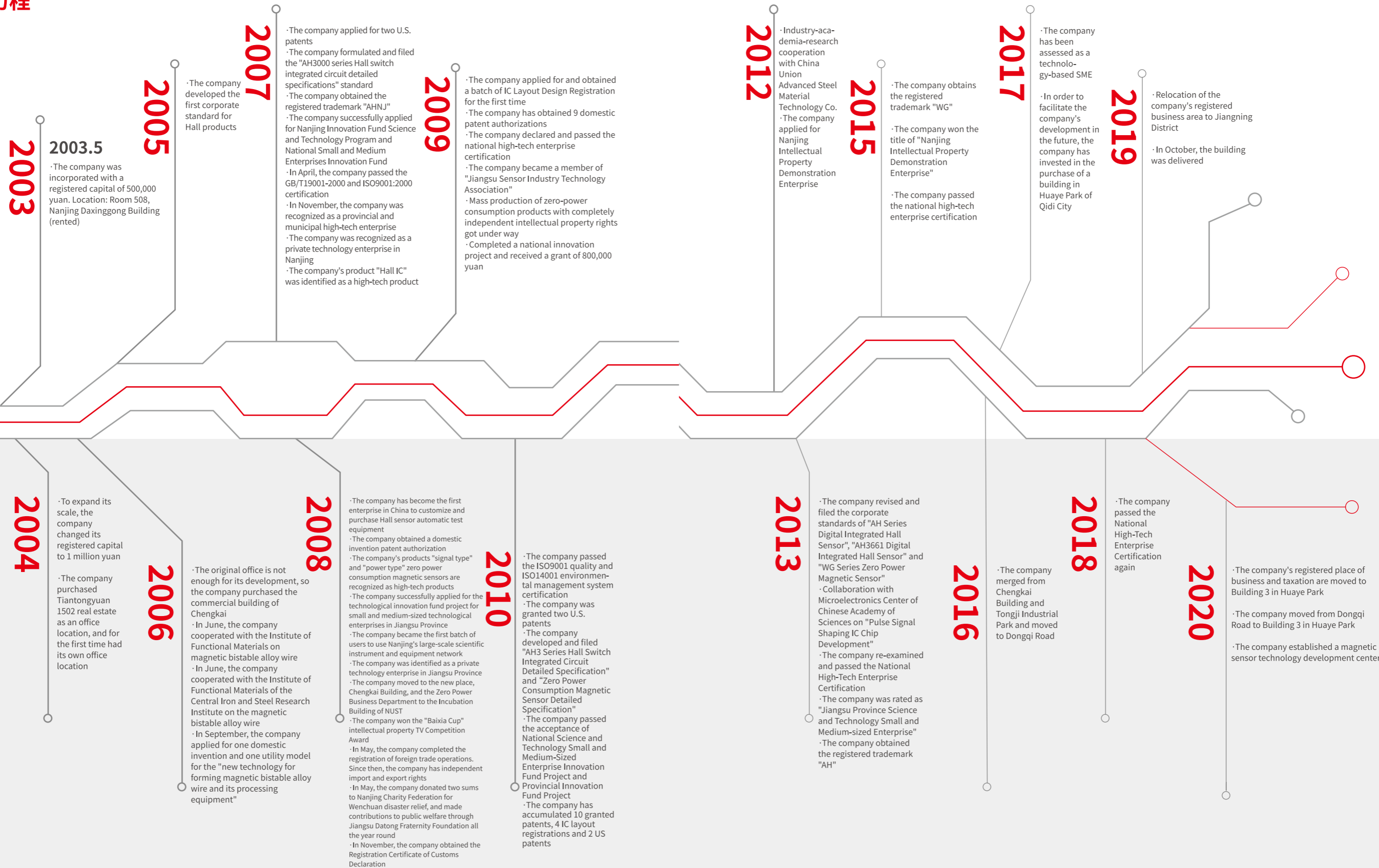
# CORPORATE HISTORY

## 企业历程



# CORPORATE HISTORY

## 企业历程



# COMPANY CULTURE

## 企业文化



## 企业文化 COMPANY CULTURE

我们以创新为动力,合作谋发展!

We take innovation as the driving force and seek development through cooperation!

<b>MISSION</b>	<b>使命:</b> 用技术引领企业发展; Lead the enterprise's development with technology;
<b>VISION</b>	<b>愿景:</b> 打造磁传感器行业知名民族品牌; Create a well-known national brand in magnetic sensor industry;
<b>IDEA</b>	<b>理念:</b> 创新,和谐,共赢; Innovation, harmony and win-win;
<b>VALUES</b>	<b>价值观:</b> 以诚信,感恩的心对待员工,客户以及社会。 Treat employees, customers and society with sincerity and gratitude.

## 企业宗旨 COMPANY MISSION

致力于研制和生产具有中国自主知识产权的高水平磁传感器及应用产品。

Dedicated to the development and production of high-level magnetic sensors and their application products with China's independent intellectual property rights.



# Honor 荣誉资质

## 资质证书 QUALIFICATIONS



## 认证证书 CERTIFICATIONS



# INTELLECTUAL PROPERTY

## 知识产权

### 发明专利 INVENTION PATENTS



### 集成电路布图设计 LAYOUT-DESIGNS OF ICs



# R & D CENTER

## 研发中心



公司工程技术中心的成长异常醒目，技术团队由老中青三代专家组成，有条不紊地应对当下日益繁多的技术挑战，为客户提供完善的售前咨询和放心满意的售后技术服务。

The growth of the company's Engineering Technology Center is exceptionally striking. The technical team consists of three generations of experts, who methodically respond to the increasingly numerous technical challenges of the time and provide customers with satisfying pre-sales consultation and after-sales services.



# LABORATORY EQUIPMENT

## 实验设备



公司技术中心拥有SMT试验线、晶圆中测系统、高分辨率金相显微镜等专业开发设备。工程技术中心还自研出多台专用设备，针对不同产品实现批量化、精准化测试。在霍尔集成电路方面，公司还形成了包括设计、测试和质量分析等环节在内的较完整的实验流程。

The experiment center has professional equipment such as SMT test line, wafer test system, high-resolution metallurgical microscope, etc. The Engineering Technology Center has also developed several special equipment for batch and precision testing for different products. In terms of Hall IC, the company has formed a more comprehensive experimental process including design, testing and quality analysis.



# PRODUCT DESCRIPTION

## 产品介绍



霍尔效应集成电路  
Hall Effect IC



零功耗磁敏传感器(韦根传感器)  
Wiegand Sensor



应用产品  
Application Products



# Hall Effect Integrated Circuit (Magnetic Sensor)

## 霍尔效应集成电路(磁传感器)

### 概述 Overview

南京艾驰电子科技有限公司作为国内知名的民族品牌企业,我们向客户提供多种基于硅的,可以服务于许多高端领域的电子磁传感器。

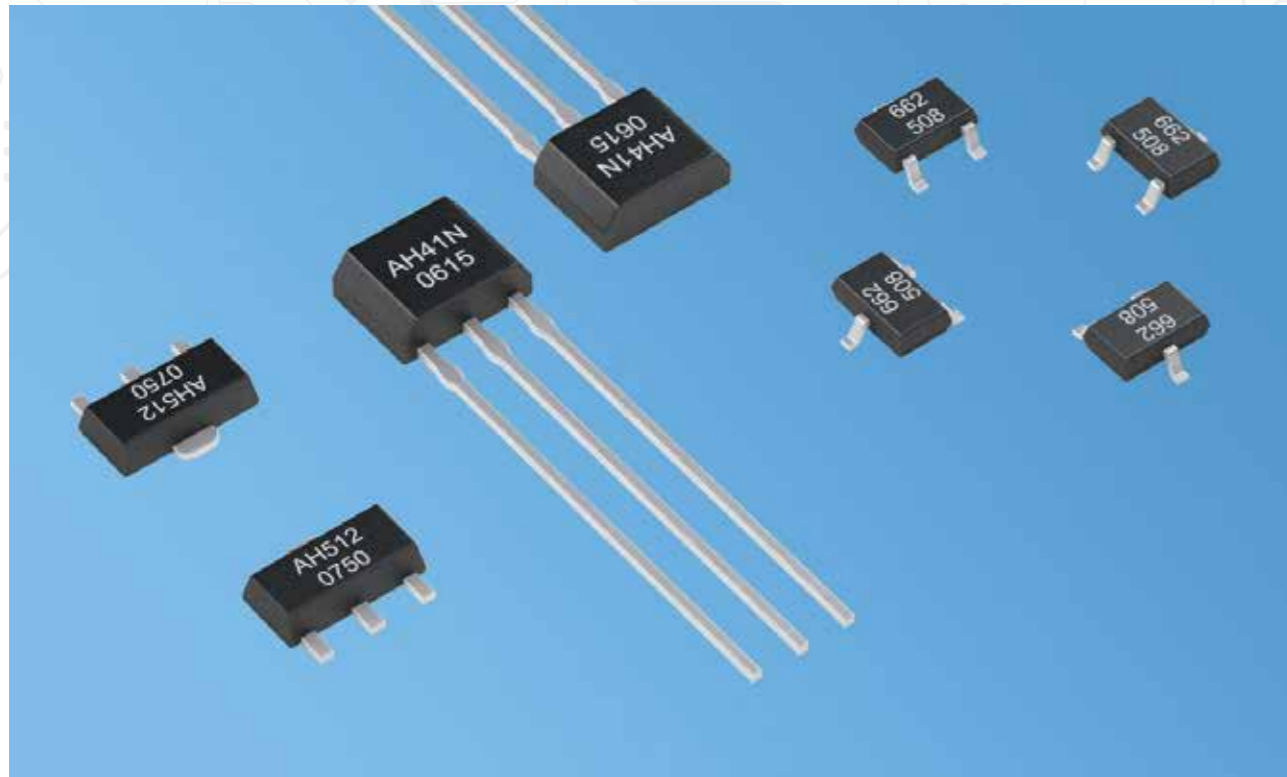
南京艾驰电子科技有限公司的集成电路(磁传感器)基于霍尔效应技术,实现非接触传感,没有机械磨损,可以感应一个外部磁铁或含铁的物体。具体的说霍尔效应传感器可以用于高精度齿轮传感,方向检测,线性传感,速度传感,位置传感及非接触切换等。

As a well-known national brand in China, we offer our customers a wide range of silicon based electronic magnetic sensors that can apply in many high-end fields.

The integrated circuits (magnetic sensors) of Nanjing AH Electronic Science & Technology Co., Ltd. are based on Hall effect technology, which enables non-contact sensing without mechanical wear and tear, and can sense an external magnet or an object containing iron. Specifically speaking, Hall effect sensors can be used for high precision gear sensing, direction detection, linear sensing, speed sensing, position sensing and non-contact switching.

### 产品类型 Product type

- |                     |   |
|---------------------|---|
| 1.单磁极工作霍尔效应数字开关     | 1. Unipolar Hall Effect Digital Switch            |
| 2.双磁极工作霍尔效应数字开关     | 2. Bipolar Hall Effect Digital Switch             |
| 3.全磁极工作霍尔效应数字开关     | 3. Omnipolar Hall Effect Digital Switch           |
| 4.线性输出霍尔效应集成电路(传感器) | 4. Linear Hall Effect Integrated Circuit (Sensor) |
| 5.可编程线性霍尔效应传感器      | 5. Programmable Linear Hall Effect Sensor         |
| 6.双输出霍尔效应数字开关       | 6. Dual Output Hall Effect Digital Switch         |
| 7.低功耗霍尔效应数字开关       | 7. Micropower Hall Effect Digital Switch          |
| 8.齿轮应用霍尔效应传感器       | 8. Hall Effect Sensor for Gear Application        |
| 9.其他应用霍尔效应传感器       | 9. Hall Effect Sensor for Other Application       |



### 细分行业 Sub-industry

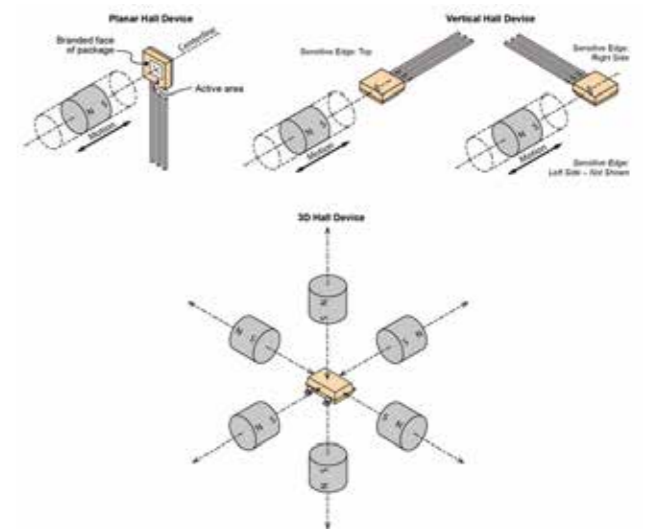
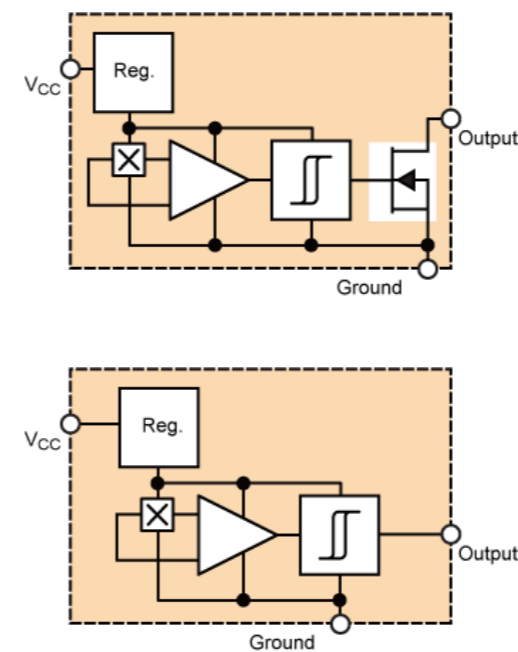
机床, 电梯门机, 自动化设备, 无人机, 接近开关, 液位检测, 舞台灯控制, 打印机, 电梯控制, 智能门锁, 智能门窗, 电动晾衣架, 跑步机, 扫地机器人, 蓝牙耳机, 按摩椅, 智能玩具, 燃气热水器, 洗衣机, 智能马桶, 空调, 电动工具, 智能水表, 电表, 空气净化器, 冰箱, 洗碗机, 微波炉, 烤箱, 电饭煲, 咖啡机, 榨汁机, 油烟机, 自动售货机, 游戏机等。

Machine tools, elevator door machines, automation equipment, drones, proximity switches, liquid level detection, stage light control, printers, elevator control, smart door locks, smart doors and windows, electric drying racks, treadmills, floor robots, Bluetooth earphones, massage chairs, smart toys, gas water heaters, washing machines, smart toilets, air conditioners, power tools, smart water meters, electricity meters, air purifiers, refrigerators, dishwashers, microwave ovens, ovens, rice cookers, coffee machines, juicers, hoods, vending machines, game consoles, etc.

### 应用范围 Scope of application

传统汽车领域, 电动自行车领域, 新能源汽车领域, 工业伺服系统领域, 机器人领域, 工业位置, 速度检测领域, 步进电机和直流驱动系统领域, 无刷电机系统领域, 智能制造领域等。

Traditional automobile field, electric bicycle field, new energy vehicle field, industrial servomechanism field, robot field, industrial position, speed detection, stepping motor and DC drive system, brushless motor system, intelligent manufacturing, etc.



# Zero-Power Magnetic Sensors (Wiegand sensors)

## 零功耗磁敏传感器(韦根传感器)

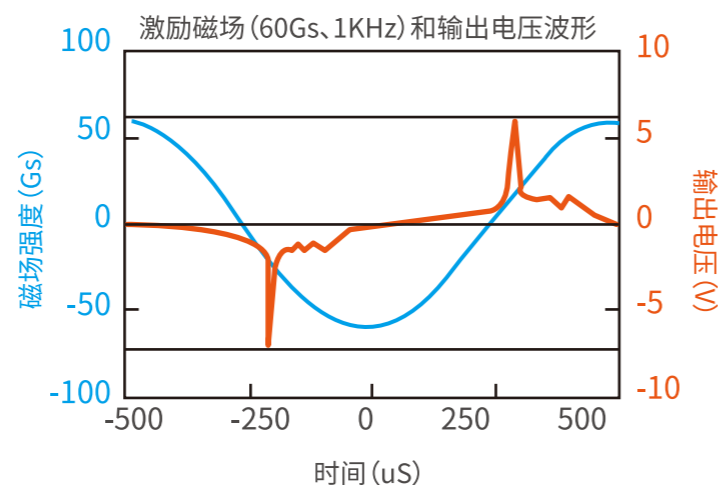
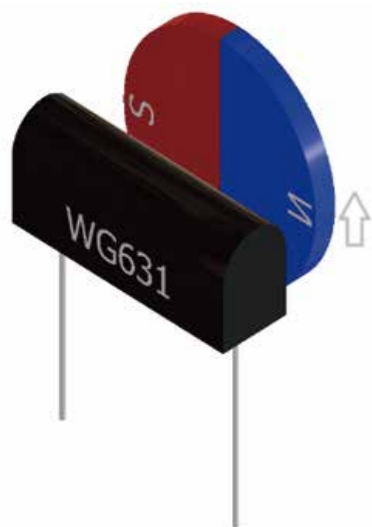
### 概述 Overview

零功耗磁敏传感器(也称韦根传感器)基于韦根效应制造,能够主动产生能量,使用时无需外加电源,就可产生尖锐的电压脉冲信号。产生的脉冲不但可以作为一种自供电的脉冲信号发生器,也可为超低功率设备提供能量。因此,这使得零功耗磁敏传感器在低功耗和节能应用中有着独特的优势。

南京艾驰电子科技有限公司作为全球领先的零功耗磁敏传感器生产商,有着数十年的传感器生产经验,已为全球超过百万台的设备提供了零功耗磁敏传感器。

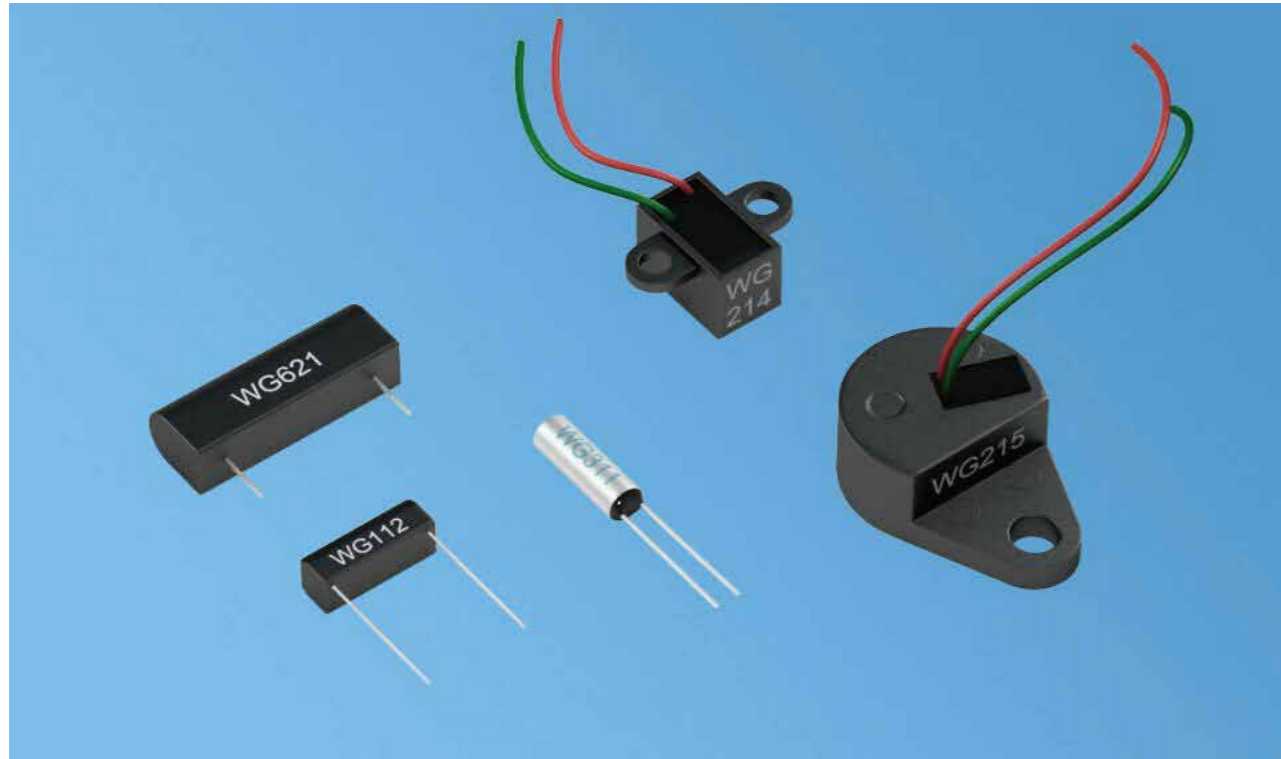
Zero-power magnetic sensors (also known as Wiegand sensors) are manufactured based on the Wiegand effect and are capable of actively generating energy to produce sharp voltage pulses without the external power supply. The generated pulses can be used not only as a self-powered pulse generator, but also can provide energy for ultra-low power devices, which make zero-power magnetic sensors uniquely suited for low-power and energy-saving applications.

Nanjing AH Electronic Science & Technology Co., Ltd. is the world's leading manufacturer of zero-power magnetic sensors, with decades of experience in manufacturing sensors for millions of devices worldwide.



### 特点 Features

- **工作时无需外部供电**
- **双磁极激励工作方式**  
外部触发磁场极性变化一周,传感器输出一对正负电脉冲信号。
- **非接触式电磁采集**  
磁场感应装置和触发磁场之间无机械触点、无电火花,属于本质安全型器件。
- **恒定脉冲能量**  
传感器输出的脉冲能量值与磁场变化频率无关,即使在磁场变化频率极低的情况下,所产生的脉冲能量值依然保持在恒定水平。在磁场变化频率较高的情况下,由于额外的感应效应,则会产生更高的能量。
- **工作性能稳定**  
只有当外加磁场极性发生变化,且磁感应强度达到激励阈值时,传感器才输出一个脉冲信号,因此不会产生颤动现象。即便是极性进行数百万次转换,脉冲输出能量依然保持恒定。
- **局域网管理**  
输出信号可利用信号线进行远传,适合于局域网管理。
- **工作温度范围宽,环境适应性强**
- **Operating without external power supply**
- **Dual pole excitation operation**  
The polarity of the external trigger magnetic field changes for one cycle, and the sensor outputs a pair of positive and negative electric pulse signals.
- **Non-contact EM acquisition**  
It is an intrinsically safe device without mechanical contact and electric spark between the magnetic field induction device and the trigger magnetic field.
- **Constant pulse energy**  
The value of the pulse energy output by the sensor is independent of the frequency of the magnetic field change and remains stable even at very low magnetic field change frequencies. At higher frequencies of magnetic field variation, higher energy is generated due to additional inductive effects.
- **Stable operating performance**  
No vibration occurs for the sensor outputs a pulse signal only when the polarity of the applied magnetic field changes and the magnetic flux density reaches the excitation threshold. The pulse output energy remains stable even when the polarity is switched millions of times.
- **LAN Management**  
The output signal can be transmitted remotely using signal wires, which is suitable for local area network management.
- **Wide operating temperature range, strong environmental adaptability**



**信号型**

- 磁感应强度: 5mT~10mT
- 输出幅值:  $\geq 1.5V$
- 脉宽: 12 $\mu$ S
- 工作频率: 10KHz
- 直流内阻范围: 650 $\Omega$ ~1300 $\Omega$
- 最大工作温度范围: -40 $^{\circ}C$ ~125 $^{\circ}C$

**功率型**

- 磁感应强度: 6mT~12mT
- 输出幅值:  $\geq 5V$
- 脉宽: 14 $\mu$ S
- 工作频率: 1KHz
- 直流内阻: 270 $\Omega$
- 工作温度: -40 $^{\circ}C$ ~125 $^{\circ}C$

**Signal type**

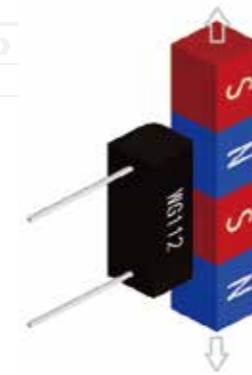
- Magnetic flux density: 5mT~10mT
- Output amplitude:  $\geq 1.5V$
- Pulse width: 12 $\mu$ S
- Working frequency: 10KHz
- Internal DC resistance range: 650 $\Omega$ ~1300 $\Omega$
- Maximum operating temperature range: -40 $^{\circ}C$ ~125 $^{\circ}C$

**Power type**

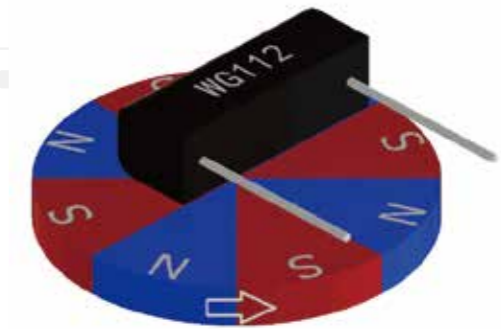
- Magnetic flux density: 6mT~12mT
- Output amplitude:  $\geq 5V$
- Pulse width: 14 $\mu$ S
- Working frequency: 1KHz
- Internal DC resistance: 270 $\Omega$
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**应用 Application**

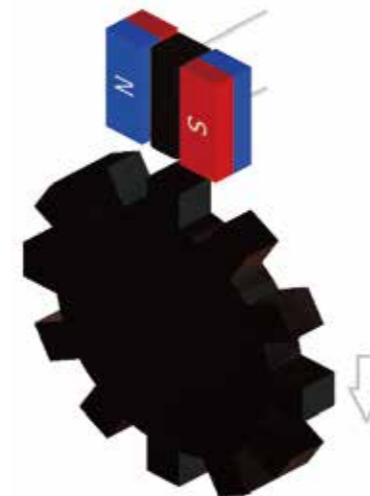
**线性运动:** 接近或位置检测。  
**Linear movement:** proximity or position detection.



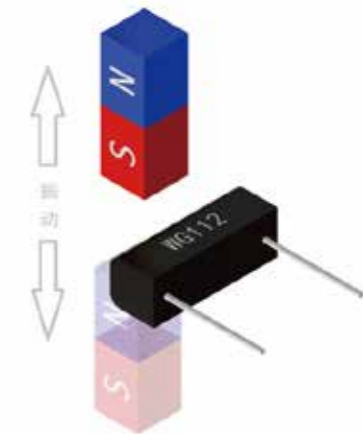
**旋转运动:** 对旋转进行计数和定位。  
**Rotational movement:** counting and positioning the rotation.



**接近感应:** 感应铁磁材料的接近和移动。  
**Proximity sensing:** sensing the approach and movement of ferromagnetic materials.



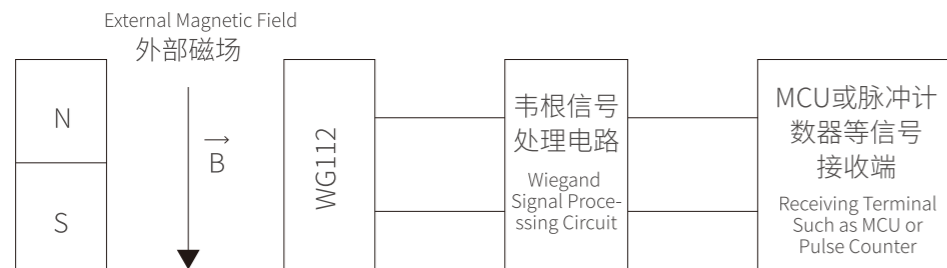
**振动检测:** 振动和位移检测。  
**Vibration detection:** vibration and displacement detection.



- 门动传感器 · Automatic Door Sensors
- 位移传感器 · Displacement Sensors
- 流量计 · Flow Meters

- 转速计 · Tachometer
- 接近传感器 · Proximity Sensors
- 运动控制传感器 · Motion Control Sensors

**无源脉冲信号发生器 Passive pulse signal generator**



信号处理一般架构  
General Architecture of Signal Processing

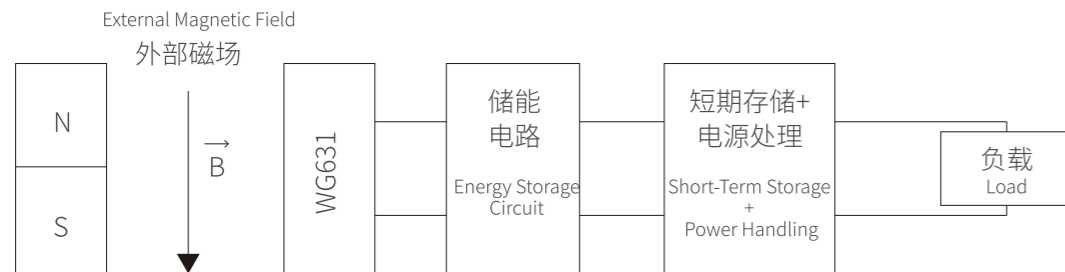
零功耗磁敏传感器作为一种无源信号发生器可用于智能型水表、热量表的流量计量；高速列车、电动车的转速计算；油库液位、翻斗式雨量计的位置检测等。

Magnetic sensor as a passive signal generator can be used for intelligent water meter, flow measurement of heat meter, speed calculation of high-speed trains and electric car, oil level measurement, position detection of tilting rain gauge, etc.

零功耗磁敏传感器产生的脉冲能量，不但可以作为无源脉冲信号发生器，也可作为电子元器件的供电装置。连续产生的脉冲能量，可为电路提供所需的能量补偿。采用专用的超低功率芯片，则可使单个脉冲能量满足系统的触发性或间歇性工作需求。例如：基于机械能采集的多圈编码器、基于无线电力传输的医用经皮设备、自供电的物联网传感器等。

The pulse energy generated by the zero-power magnetic sensor can be used not only as a passive pulse signal generator, but also as a power supply for electronic components. The continuously generated pulse energy can provide the required energy compensation for the circuit. With a dedicated ultra-low power chip, the individual pulse energy can be used to meet the system's triggered or intermittent operating requirements. Examples include multi-turn encoders based on mechanical energy acquisition, medical percutaneous devices based on wireless power transmission, and self-powered IoT sensors.

**电子元器件供电 Power supply for electronic components**



能量处理一般架构  
General Architecture for Energy Processing

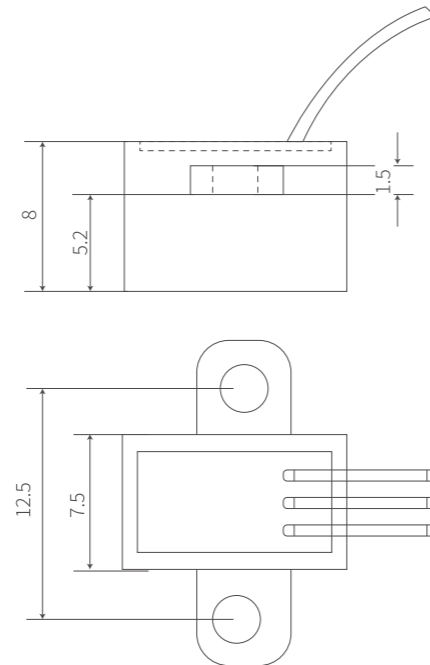
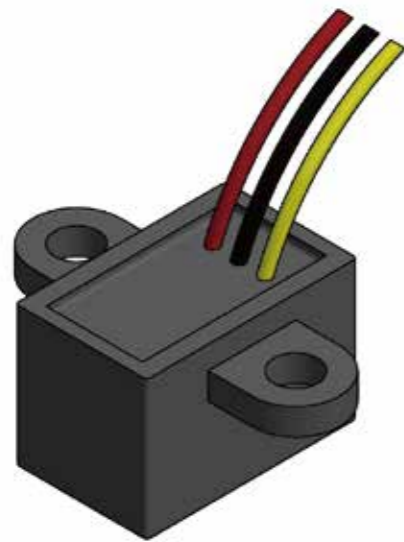


# Application Products

## 应用产品

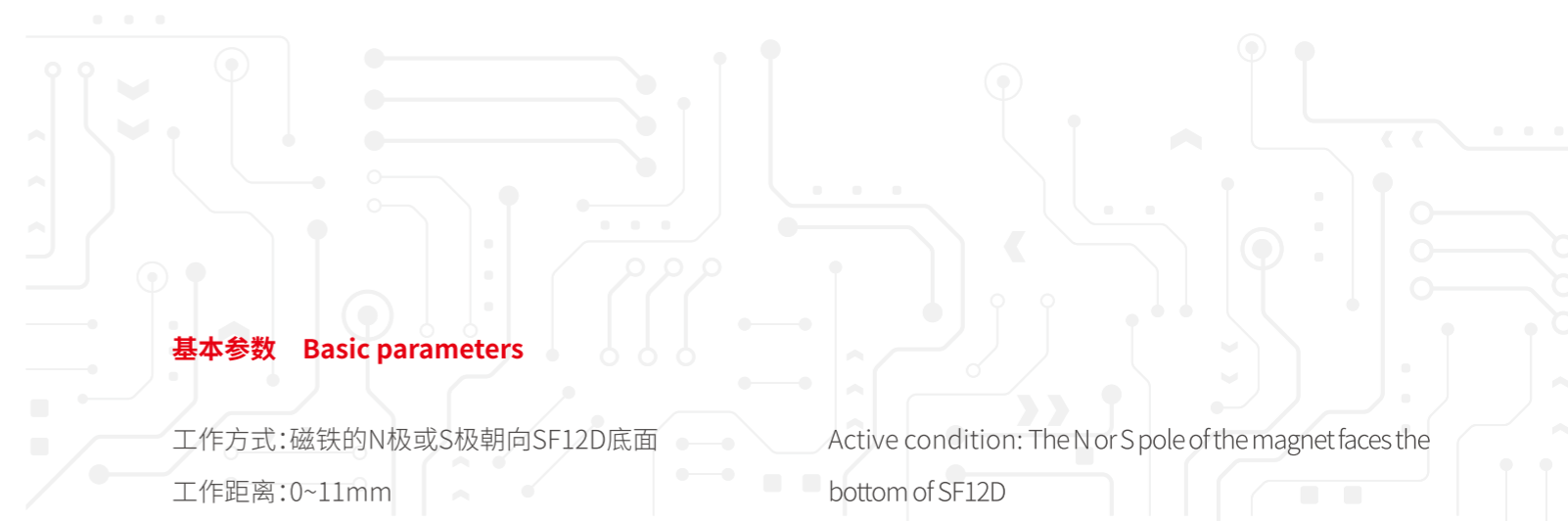
### 1 微型磁接近开关AH-SF12D Miniature magnetic proximity switch AH-SF12D

#### 产品简介 Product Introduction



AH-SF12D是一款数字信号输出的位置传感器,其输出电平随磁场有无高低变化。产品采用的霍尔芯片使传感器具有全磁极(即不分S极或N极)磁场激励功能、优良的正负磁开关对称性、以及极小的平均功耗电流等特点。

AH-SF12D is a position sensor with digital output. Its output level varies with the presence or absence of a magnetic field. The Hall chip used in the product enables the sensor to have an omni-pole (S or N pole) magnetic field excitation function, excellent positive and negative magnetic switching symmetry, and small average consumption current.



#### 基本参数 Basic parameters

工作方式:磁铁的N极或S极朝向SF12D底面  
工作距离:0~11mm  
工作电压:2.5~5.5V  
标准磁铁:D6X4,N35  
工作温度:-40~85°C  
工作频率:10Hz  
功耗电流:小于10uA

Active condition: The N or Spole of the magnet faces the bottom of SF12D  
Operating range: 0~11mm  
Operating voltage: 2.5~5.5V  
Standard magnet: D6X4, N35  
Operating temperature: -40~85°C  
Operating frequency: 10Hz  
Consumption current: less than10uA

#### 适用场景 Application scene

各种家电,玩具,门窗位置检测,及对尺寸和功耗要求较高的场合。

Various types of home appliances, toys, door and window position detection, and occasions with high requirements for size and power consumption.

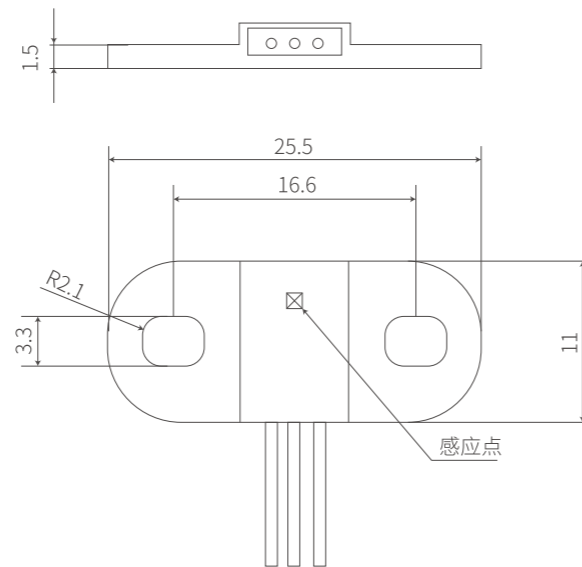
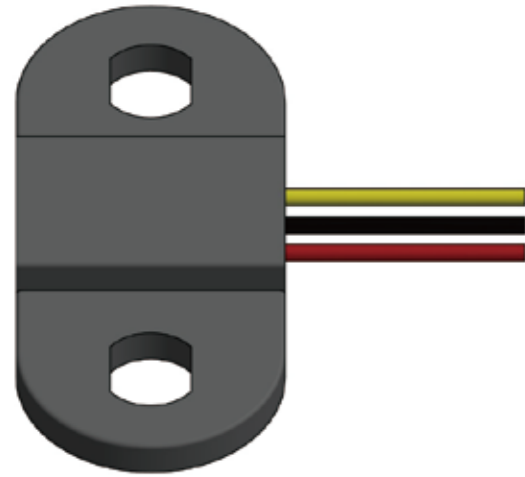
#### 拓展描述 Extended information

SF12D是该品类的基本外形,可根据实际需要定制功能和性能,定制功能可基于霍尔电路各种特性,达到单极触发,全极性触发,双极性锁定等效果,甚至可以根据实际工况进行设计调整工作距离等。

The shape of SF12D is the model of its series and its features and functions can be customized according to the actual needs. Based on various features of the Hall circuit, customized functions can be achieved such as unipolar active, omnipolar active, bipolar latch, etc. Even the operating distance can be designed and adjusted to the working conditions.

## 2 微型超薄高精度磁接近开关AH-SF166 Miniature ultra-thin high-precision magnetic proximity switch AH-SF166

### 产品简介 Product Introduction



AH-SF166是一款超薄型数字信号输出的位置传感器,采用一致性和可靠性较高的霍尔电路作为感应芯片,产品拥有出色的外形尺寸,能够胜任大多数尺寸要求苛刻的应用场合。

AH-SF166 is an ultra-thin position sensor with digital output. It uses Hall circuit with high consistency and reliability as the sensing chip. The product has excellent dimensions and can be competent for most applications with strict dimensional requirements.

### 基本参数 Basic parameters

工作方式:磁铁的N极或S极朝向SF166底面  
工作距离:0~7mm(使用磁铁为D3x3, N35)  
工作电压:2.5~22V  
标准磁铁:D6X4, N35  
工作温度:-40~125°C  
工作频率:10KHz  
功耗电流:小于8mA

Active condition: The N or S pole of the magnet faces the bottom of SF166  
Operating range: 0~7mm (the magnets used are D3X3, N35)  
Operating voltage: 2.5~22V  
Standard magnet: D6X4, N35  
Operating temperature: -40~125°C  
Operating frequency: 10KHz  
Consumption current: less than 8mA

### 适用场景 Application scene

各种家电, 门窗位置检测, 工业位置检测, 高精度位置检测, 对于尺寸有严格要求的场合。

Various types of home appliances, door and window position detection, industrial position detection, high-precision position detection, and occasions with strict requirements on the size.

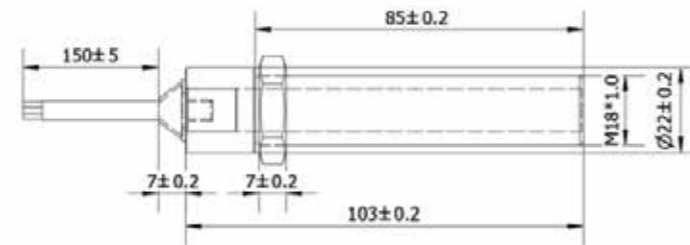
### 拓展描述 Extended information

SF166是该品类的基本外形, 可根据实际需要定制功能和性能,定制功能可基于霍尔电路各种特性, 达到单极触发, 全极性触发, 双极性锁定等效果, SF166主要应用方向为精度较高的应用场合, 结合我们在霍尔电路上的独特优势, 可以提供超高感应精度的产品。

The shape of SF166 is the model of its series and its features and functions can be customized according to the actual needs. Based on various features of the Hall circuit, customized functions can be achieved such as unipolar active, omnipolar active, bipolar latch, etc. The main application of SF166 is for high precision detection. With our unique advantages in Hall circuit design, we can provide products with ultra-high sensing accuracy.

### 3 齿轮速度传感器AH-T18103 Gear speed sensor AH-T18103

#### 产品简介 Product Introduction



AH-T18系列齿轮传感器是一款自适应调节、数字输出的齿轮转速传感器,利用配置有磁钢偏置的霍尔芯片来监测类钛金属的运动。传感器内部所用的霍尔芯片中只有单个霍尔元件,在使用中不存在对正问题;输出形式采用数字沉电流输出形式(集电极开路)。霍尔芯片及其电路板被密封在探头形式的金属外壳内,能够有效避免电磁干扰和潮湿水气的侵入,比电磁感应传感器有更好的信噪比,优异的低速性能,可实现“零速”检测。

The AH-T18 series gear sensor is a gear speed sensor with self-adaptive control and digital output. It uses a Hall chip equipped with a magnetic bias magnet to monitor the movement of titanium-like metals. The Hall chip used inside the sensor contains only a single Hall element, so there is no alignment problem in use. The output form adopts the digital sink current output (open collector). The Hall chip and its circuit board are sealed in a metal shell in the form of a probe, which can effectively avoid electromagnetic interference and moisture intrusion. It has a better signal-to-noise ratio than an electromagnetic induction sensor, excellent low-speed performance, and can achieve "Zero Speed" detection.

#### 基本参数 Basic parameters

工作方式:被测物体(导磁体)朝向AH-T18103底面  
安装距离:1~3mm  
工作电压:5~24V(建议使用12V)  
输出信号:方波,其峰峰值约等于工作电源电压,和转速无关  
工作温度:-40~100°C  
工作频率:0-20KHz  
功耗电流:小于10mA

Active condition: The measured object (magnetic conductor) faces the bottom of AH-T18103  
Installation distance: 1~3mm  
Operating voltage: 5~24V (12V recommended)  
Output signal: Square wave, its peak-to-peak value is approximately equal to the supply voltage, independent of speed  
Operating temperature: -40~100°C  
Operating frequency: 0-20KHz  
Consumption current: less than 10mA

#### 适用场景 Application scene

曲轴和凸轮轴速度/位置检测 | 防抱死系统控制 | 链轮齿速检测 | 链输送带的速度和距离检测

Crank and camshaft speed/position detection | Anti-lock system control | Sprocket speed detection | Speed and distance detection of chain conveyor

#### 拓展描述 Extended information

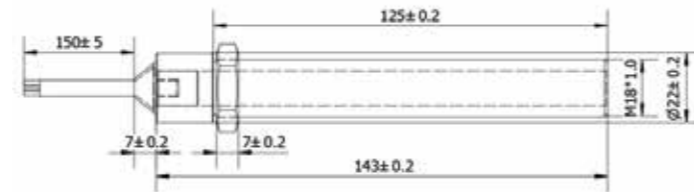
AH-T18103是该品类的基本外形,螺纹规格M18\*1.0或M18\*1.5, M16\*1.5(可根据实际需要定制产品尺寸、线束规格)。

The shape of AH-T18103 is the model of its series. Thread specifications M18\*1.0 or M18\*1.5, M16\*1.5 (product size and wiring harness specifications can be customized according to actual needs).



## 4 齿轮速度传感器AH-T18143 Gear speed sensor AH-T18143

### 产品简介 Product Introduction



AH-T18系列齿轮传感器是一款自适应调节、数字输出的齿轮转速传感器,利用配置有磁钢偏置的霍尔芯片来监测类钛金属的运动。传感器内部所用的霍尔芯片中只有单个霍尔元件,在使用中不存在对正问题;输出形式采用数字沉电流输出形式(集电极开路)。霍尔芯片及其电路板被密封在探头形式的金属外壳内,能够有效避免电磁干扰和潮湿水气的侵入,比电磁感应传感器有更好的信噪比,优异的低速性能,可实现“零速”检测。

The AH-T18 series gear sensor is a gear speed sensor with self-adaptive control and digital output. It uses a Hall chip equipped with a magnetic bias magnet to monitor the movement of titanium-like metals. The Hall chip used inside the sensor contains only a single Hall element, so there is no alignment problem in use. The output form adopts the digital sink current output (open collector). The Hall chip and its circuit board are sealed in a metal shell in the form of a probe, which can effectively avoid electromagnetic interference and moisture intrusion. It has a better signal-to-noise ratio than an electromagnetic induction sensor, excellent low-speed performance, and can achieve "Zero Speed" detection.

### 基本参数 Basic parameters

工作方式:被测物体(导磁体)朝向AH-T18143底面  
安装距离:1~3mm  
工作电压:5~24V(建议使用12V)  
输出信号:方波,其峰峰值约等于工作电源电压,和转速无关  
工作温度:-40~100°C  
工作频率:0-20KHz  
功耗电流:小于10mA

Active condition: The measured object (magnetic conductor) faces the bottom of AH-T18143  
Installation distance: 1~3mm  
Operating voltage: 5~24V (12V recommended)  
Output signal: Square wave, its peak-to-peak value is approximately equal to the supply voltage, independent of speed  
Operating temperature: -40~100°C  
Operating frequency: 0-20KHz  
PConsumption current: less than 10mA

### 适用场景 Application scene

曲轴和凸轮轴速度/位置检测 | 防抱死系统控制 | 链轮齿速检测 | 链输送带的速度和距离检测

Crank and camshaft speed/position detection | Anti-lock system control | Sprocket speed detection | Speed and distance detection of chain conveyor

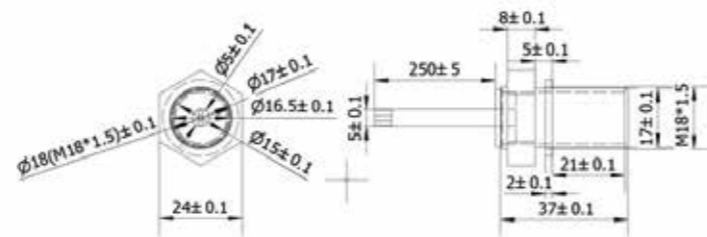
### 拓展描述 Extended information

AH-T18143是该品类的基本外形,螺纹规格M18\*1.0或M18\*1.5, M16\*1.5(可根据实际需要定制产品尺寸、线束规格)。

The shape of AH-T18143 is the model of its series. Thread specifications M18\*1.0 or M18\*1.5, M16\*1.5 (product size and wiring harness specifications can be customized according to actual needs).

## 5 齿轮速度传感器AH-T1837 Gear speed sensor AH-T1837

### 产品简介 Product Introduction



H-T18系列齿轮传感器是一款自适应调节、数字输出的齿轮转速传感器，利用配置有磁钢偏置的霍尔芯片来监测类钛金属的运动。传感器内部所用的霍尔芯片中只有单个霍尔元件，在使用中不存在对正问题；输出形式采用数字沉电流输出形式（集电极开路）。霍尔芯片及其电路板被密封在探头形式的金属外壳内，能够有效避免电磁干扰和潮湿水气的侵入，比电磁感应传感器有更好的信噪比，优异的低速性能，可实现“零速”检测。

The AH-T18 series gear sensor is a gear speed sensor with self-adaptive control and digital output. It uses a Hall chip equipped with a magnetic bias magnet to monitor the movement of titanium-like metals. The Hall chip used inside the sensor contains only a single Hall element, so there is no alignment problem in use. The output form adopts the digital sink current output (open collector). The Hall chip and its circuit board are sealed in a metal shell in the form of a probe, which can effectively avoid electromagnetic interference and moisture intrusion. It has a better signal-to-noise ratio than an electromagnetic induction sensor, excellent low-speed performance, and can achieve "Zero Speed" detection.



### 基本参数 Basic parameters

工作方式：被测物体（导磁体）朝向AH-T1837底面

安装距离：1~3mm

工作电压：5~24V（建议使用12V）

接线顺序：棕色：电源；蓝色：接地；黑色：输出（方波信号）

工作温度：-40~100℃

工作频率：0-20KHz

功耗电流：小于10mA

Active condition: The measured object (magnetic conductor) faces the bottom of AH-T1837

Installation distance: 1~3mm

Operating voltage: 5~24V (12V recommended)

Order of connection: Brown: power supply; blue: ground; black: output (square wave signal)

Operating temperature: -40~100℃

Operating frequency: 0-20KHz

Consumption current: less than 10mA

### 适用场景 Application scene

曲轴和凸轮轴速度/位置检测 | 防抱死系统控制 | 链轮齿速检测 | 链输送带的速度和距离检测

Crank and camshaft speed/position detection | Anti-lock system control | Sprocket speed detection | Speed and distance detection of chain conveyor

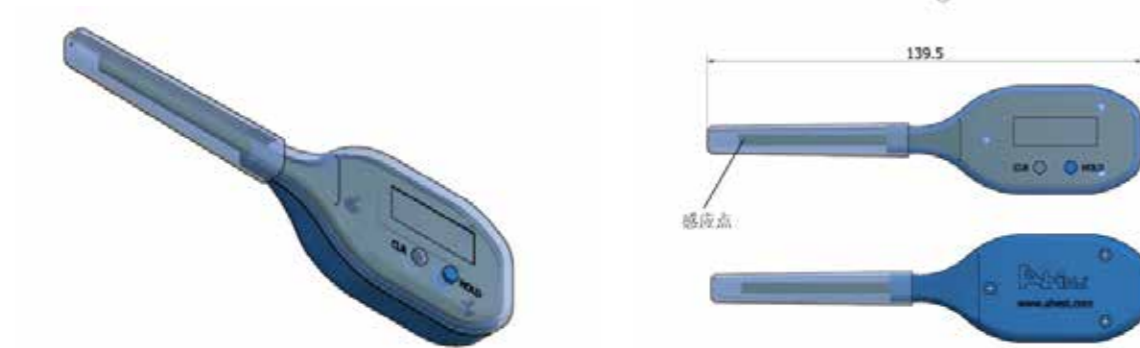
### 拓展描述 Extended information

AH-T1837是该品类的基本外形，螺纹规格M18\*1.5或M18\*1.0（可根据实际需要定制产品尺寸、线束规格）。

The shape of AH-T1837 is the model of its series. Thread specifications M18\*1.0 or M18\*1.5, M16\*1.5 (product size and wiring harness specifications can be customized according to actual needs).

## 6 便携式高斯计AH-GST-001B Portable Gauss meter AH-GST-001B

### 产品简介 Product Introduction



AH-GST-001B是我司研制的可充电式便携式高斯计,内置3.7V锂电池,兼容普通5V充电器,或者USB接口充电。可测量0~1特斯拉范围内的磁场强度,拥有较高的检测精度和便利性设计及较低的成本,能够胜任多种应用场景。

AH-GST-001B is a rechargeable portable Gauss meter developed by our company, with built-in 3.7V lithium battery, compatible with ordinary 5V chargers, or USB interface charging. It can measure the magnetic field strength in the range of 0 to 1 Tesla, has high detection accuracy, convenient design and low cost, and can be used in a variety of application scenarios.



### 基本参数 Basic parameters

工作方式:高斯计敏感点紧贴待测磁场,或者置于磁场中间  
检测范围:0~1T(最大可设置为2T)  
检测精度:0~200mT 2% 200mT~2000mT 5%  
显示方式:128X64 0.91寸OLED

工作温度:0~50°C  
响应频率:10Hz  
工作时间:充满电可连续工作6小时以上  
待机时间:一次充满电可待机15天以上

Active condition: The sensitive point of the Gauss meter is close to the magnetic field, or placed in the middle of the magnetic field

Detection range: 0~1T (maximum can be set to 2T)

Detection accuracy: 0~200mT 2% 200mT~2000mT 5%

Display mode: 128X64 0.91 inch OLED

Operating temperature: 0~50°C

Response frequency: 10Hz

Duration: Fully charged can work continuously for more than 6 hours

Standby time: Fully charged can standby for more than 15 days

### 适用场景 Application scene

常规的磁场检测,磁铁检测,便携应用场景。

Conventional magnetic field detection, magnet detection, portable application scenarios.

# APPLICATION FIELD

## 应用领域

公司在与客户不断深化的合作中,承接过许多传感器模组和成套方案的开发工作,在诸多领域积累了丰富的设计经验和实验数据,重新定义了业务范围和合作广度,提供成套方案已成为公司新的增长点。

In the deepening cooperation with customers, the company has undertaken the development of many sensor modules and complete sets of solutions, and has accumulated rich design experience and experimental data in many fields, redefining the scope of business and the breadth of cooperation, and providing complete sets of solutions has become a new growth point for the company.





# BUSINESS SCOPE

## 业务范围

产品销售全球足迹:

美国、奥地利、澳大利亚、巴西、波兰、丹麦、德国、俄罗斯、法国、韩国、荷兰、马来西亚、美国、墨西哥、南非、日本、瑞士、塞尔维亚、斯洛文尼亚、泰国、土耳其、乌克兰、西班牙、香港、新加坡、以色列、意大利、印度、英国、越南.....

Global footprint of product sales:

United States, Austria, Australia, Brazil, Poland, Denmark, Germany, Russia, France, South Korea, Netherlands, Malaysia, United States, Mexico, South Africa, Japan, Switzerland, Serbia, Slovenia, Thailand, Turkey, Ukraine, Spain, Hong Kong, Singapore, Israel, Italy, India, United Kingdom, Vietnam.....