



瑞安市领科汽车电子有限公司

RUIAN LINK AUTO ELECTRONICS CO., LTD



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## 简介 (ABOUT US)



### LINK PROFILE

瑞安市领科汽车电子有限公司地处经济发达交通便利的中国汽摩配之都--浙江省瑞安市塘下镇，是一家致力于汽车配件的研发、生产、销售的制造企业。目前公司拥有多处生产车间，分别生产汽车传感器、节温器、汽车开关等产品。企业拥有先进的生产加工设备、优秀的技术人员、精湛的制造工艺、检测设备、完善的管理制度，从而生产出高质量、能满足客户需求的产品。

RUIAN LINK AUTO ELECTRONICS CO., LTD is located in Tangxia, Wenzhou--the capital of China' s automobile and motorcycle. We specialize in producing vehicle parts. For now we have several production workshops, respectively producing automobile sensors, thermostats, automobile switches and other products. Our company has advanced equipment for producing and processing. We also possess excellent technicians, superb manufacturing technology, testing equipment, and a perfect management system to produce high-quality products that can meet customers' needs.



# 领科汽车电子

LINK AUTO ELECTRONICS



# 企业文化 (COMPANY CULTURE)



1

**定位**

中国领先的汽车电子配件公司  
The Chinese leading technology company

2

**理念**

诚信、敬业、务实、创新  
Integrity, dedication, pragmatism, innovation

3

**目标**

国际化、品牌化、专业化  
Internationalization, branding, specialization

4

**使命**

成就客户、成就品牌、成就员工  
Achievement customer, brand, employee



## 产品简介(PRODUCT INTRODUCTION)



### 汽车氧传感器

### Lambda oxygen sensor

汽车氧传感器安装在发动机排气管上，是电喷发动机控制系统中关键的反馈传感器。氧传感器有二氧化锆和二氧化钛两种，我司使用的是二氧化锆芯片。

The Lambda Oxygen Sensor which is installed on the exhaust pipe of the automobile engine. It is the key feedback sensor in the EFI engine control system. Oxygen sensors are available in zirconium dioxide and titanium dioxide, and we use zirconium dioxide chips.





### 汽车ABS传感器

## Anti-lock Brake (ABS) sensor



防抱死制动系统通过 ABS 传感器监控车轮速度，并将此信息发送至 ABS 计算机。防抱死制动系统计算机利用这些信息防止制动器在停车时抱死。

The anti-lock braking system uses an ABS or wheel sensor to monitor the wheel speed and send this information to the ABS computer. The ABS computer uses this information to prevent the brakes from locking during a stop.



# 全球几大主要知名氧传感器产家 (Famous brand) :



- 1、德国：博世 (BOSCH)
- 2、日本：NGK/NTK
- 3、美国：德尔福 (Delphi)
- 4、日本：电装 (Denso)

博世 (BOSCH) 常见外形:



NTK常见外形:



德尔福 (DELPHI) 常见外形:



电装 (DENSO) 常见外形:





# 领科氧传感器系列(OUR SERIES)

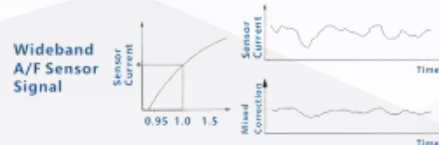
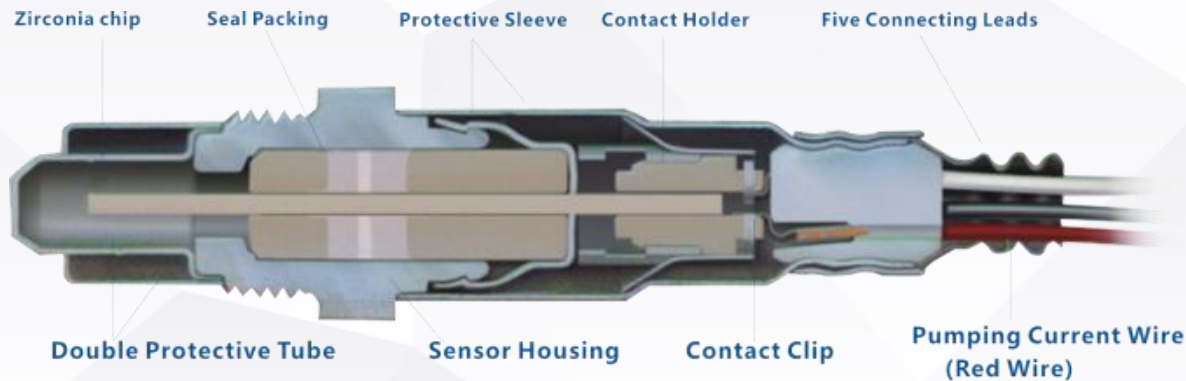


## 1. WIDE-BAND (AIR/FUEL RATIO) OXYGEN SENSOR 宽域型(空燃比)氧传感器

## 2. SWITCHING OXYGEN SENSOR 开关型氧传感器

## 3. MOTORCYCLE OXYGEN SENSOR 摩托车氧传感器

## 4. NON-HEATED OXYGEN SENSOR 非加热式氧传感器



Note: The signal from the wideband sensor does not toggle around 450 mV!





# 领科在产氧传感器外观(OUR APPLICATION)



参考德尔福外观 (FEF.DELPHI'S APPLICATION) :



参考电装外观 (FEF.DENSO'S APPLICATION) :





# 领科在产氧传感器外观(OUR APPLICATION)



参考NTK/NGK外观： (REF.NTK/NGK'S APPLICATION)



参考博世外观 (REF.BOSCH'S APPLICATION) :





# 领科在产ABS传感器系列(OUR APPLICATION)





## 领科优势(OUR ADVANTAGE)



瑞安领科脱胎于温州百岸汽车零部件有限公司氧传感器和氮氧传感器事业部。因为业务需要，氧传感器生产销售独立成本公司，而百岸公司专注于核心部件-陶瓷芯片的研究开发和生产。

目前我司生产的氧传感器和ABS传感器，芯片主要由浙江百岸科技有限公司（专注于自有技术路线的芯片研发和制造）独家供应，备用厂家:中国兵器工业集团214所。

本公司拥有传感器所需的装配，过程检测，终检等设备超20台。宽域氧传感器我们公司采用百岸研发的线性激光调阻技术，不同于市场上其他好多厂家的选配电阻方式。因为市场不同客户需要，本公司于2021年3月份，增加片式氧传感器和ABS传感器的生产，同时也在不同的技术路线的传感器之间，开发通用的装配用配件和工艺，以满足不同客户的要求！

LKET was born from the oxygen sensor and nitrogen oxygen sensor division. Because of the business needs, the production and sales of oxygen sensors independent of the company, and the company focuses on the core components: the research and development and production of ceramic chips.

The company focuses on the production of lambda sensor and ABS sensor, the chip is mainly supplied exclusively by Zhejiang Baian Technology Co.,LTD.

LKET has sensors required assembly, process testing, final inspection and other equipment more than 20. For wide-band oxygen sensor we use the linear laser developed by Baian technology, different from many other manufacturers on the market with the way of resistance selection. In March 2021, due to different customer needs, LKET increased production of chip oxygen sensors and ABS sensors, as well as between sensors in different technology routes, develop General Assembly accessories and processes to meet the requirements of different customers!



# 适用车型(FIT FOR CARS)





# 生产工艺 (PROCESS IN BAIAN WORKSHOP) ——百岸车间二氧化锆芯片(Zirconium dioxide chips)



1. 基料配比  
(base proportioning)



2. 基料成膜(substrate  
film)





# 生产工艺 (PROCESS IN BAIAN WORKSHOP) ——百岸车间二氧化锆芯片(Zirconium dioxide chips)



3.剪裁印刷电解质  
(cut and print electrolyte)



4.芯片合成  
(chip synthesis)





# 生产工艺 (PROCESS IN BAIAN WORKSHOP) ——百岸车间二氧化锆芯片(Zirconium dioxide chips)



## 5.芯片检测 (温冲+检测+老化)

Test chips(Temperature impact + detection + aging)



LSU 4.2 / 4.9

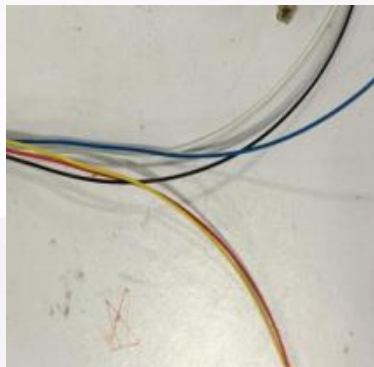




# 生产工艺 (PROCESS) —— 线束 (Wiring harness)



1. 裁线(cut lines)



2. 铜镶件安装  
(copper inserts installed)



3. 插头组装  
(plug assembled)





# 生产工艺(PROCESS)——探头部分(Joint part)



1.固定芯片  
(fixed chips)

2.装抱紧件  
(binding fastener)

3.探头焊接  
(nozzle welding)





# 生产工艺(PROCESS)——组装(Assembly)





## 检测流程 (Product testing)



成品老化  
(finished product aging)



混气测试  
(mixed gas testing)





# 检测设备 (Product equipment)



电阻检测台  
(Resistance calibration)



燃烧测试台  
(Combustion test)



ABS测试台  
(ABS Performance Test)



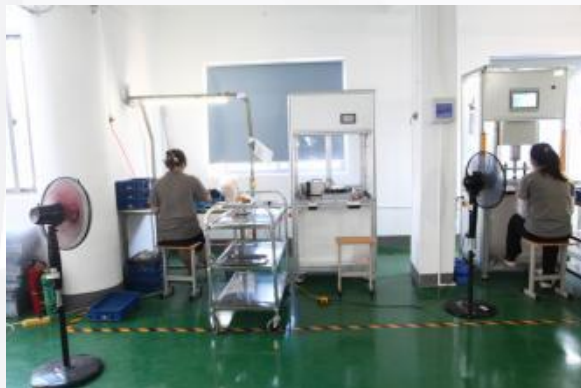


# 工厂图片(OUR FACTORY)





# 工厂图片(OUR FACTORY)





# 工厂图片(OUR FACTORY)







# 工厂仓库(OUR WAREHOUSE)





# 工厂认证CERTIFICATION——IATF16949:2016



Certificate of Registration



兹证明

**瑞安市领科汽车电子有限公司**  
浙江省温州市瑞安市塘下镇海安广场路 88 号 6-7 楼

的质量管理体系适用于

**氧传感器的生产**

已经 NQA 根据标准  
**IATF 16949:2016**  
(新增产品设计)

**审核和注册**

本注册要求组织必须按照上述标准保持其质量管理体系,并由 NQA 进行监督,若有任何争议,以英文证书为准

*Manager*  
Managing Director

NQA Certificate No:	T178707
IATF Certificate No:	0454335
Date:	24 July 2022
Valid Until:	23 July 2025
Version:	1



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Revision Date: Feb 2017 Page 1 of 1 Issue 1

Certificate of Registration



This is to certify that the Quality Management System of

**Rui'an LNK Automotive Electronics Co., Ltd.**  
Floor 6-7, No. 88 Hai'an Square Road, Tangxia Town, Rai'an, Wenzhou City, Zhejiang Province, 325204, China,

applicable to

**Manufacturing of oxygen sensors**

has been assessed and registered by  
NQA, Warwick House, Houghton Hall Park, Houghton Regis, Dunstable LU5 2ZX, Bedfordshire, England

against the provisions of

**IATF 16949:2016**  
(Clause 8.3 product design of IATF 16949 : 2016 is justifiably excluded)

This registration is subject to the company maintaining a quality management system, to the above standard, which will be monitored by NQA.

*Manager*  
Managing Director

NQA Certificate No:	T178707
IATF Certificate No:	0454335
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# 工厂认证 CERTIFICATION



**HTT TECHNOLOGY**

## Certificate of Conformity

Certificate No. : HTT202010252E

Applicant : RUAN LINK AUTO ELECTRONICS CO.,LTD  
 4/F,BUILDING 2,NO.168,LUOSHAN 1<sup>ST</sup> ROAD,LUOFENG INDUSTRIAL ZONE,TANGXIA TOWN,RUAN CITY,ZHEJIANG PROVINCE,CHINA.

Address :  
 Manufacturer : RUAN LINK AUTO ELECTRONICS CO.,LTD  
 4/F,BUILDING 2,NO.168,LUOSHAN 1<sup>ST</sup> ROAD,LUOFENG INDUSTRIAL ZONE,TANGXIA TOWN,RUAN CITY,ZHEJIANG PROVINCE,CHINA.

Manufacturer Address :  
 Product : Auto lambda oxygen sensor

LK-SFF 892,  
 LK-WQD XXX (LSU-4.9), LK-WBQ XXX (LSU-4.2),  
 LK-WCQ XXX (LSU-4.9), LK-WDQ XXX (LSU-ADV),  
 LK-SAF XXX (LSH), LK-SBF XXX (LSH),  
 LK-SCF XXX (LSF-4.2), LK-SDF XXX (LSF-4.2),  
 LK-SFF XXX (LSF-XF), LK-SFF XXX (LSF-4.2),  
 LK-DS XXX, LK-DF XXX, LK-NS XXX,  
 Attention:XXX stands for specific model.

Trademark : LKET

The above products have been tested by us with third standards and found in compliance with the council EMC 2014/53/EU. It is possible to use CE marking to denote the compliance with this EMC.

Old standards	Report Number	Issued By	Issued Date
EN IEC 4109-4-3:2009	HTT20200305E	HTT	Oct.30,2019
EN 4109-4-3:2007+AD-2011+AD:2012			
EN IEC 4109-3-3:2008			
EN 4109-3-3:2013+AD:2019			

This certificate of conformity is not transferable and based on an evaluation of a sample of the above mentioned product.

**CE**

Authorized Signer: **HTT**  
 Kevin Yang, Senior Manager

Date: Oct.30, 2020

Shenzhen HTT Technology Co., Ltd. Web: www.httgc.com

TEL: 8705-21590208 FAX: 0755-21591201 Hotline: 400-6655-185 Mail: info@httgc.com  
 1F, B Building, Huafeng International Products Industrial Park, Guiba, Baoan Street, Baoan District, Shenzhen, China

**HTT TECHNOLOGY**

## FCC SUPPLIER'S DECLARATION OF CONFORMITY

Certificate Number: HTT202010252F

Product Name: Auto lambda oxygen sensor

Model No.: LK-SFF 892,  
 LK-WBQ XXX (LSU-4.9), LK-WBQ XXX (LSU-4.2),  
 LK-WCQ XXX (LSU-4.9), LK-WDQ XXX (LSU-ADV),  
 LK-SAF XXX (LSH), LK-SBF XXX (LSH),  
 LK-SCF XXX (LSF-4.2), LK-SDF XXX (LSF-4.2),  
 LK-SFF XXX (LSF-XF), LK-SFF XXX (LSF-4.2),  
 LK-DS XXX, LK-DF XXX, LK-NS XXX,  
 Attention:XXX stands for specific model.

Trade Mark: LKET

Applicable standards: FCC CFR Title 47 Part 15 Subpart B.2017

The products comply with the FCC regulations and the electromagnetic compatibility evaluation requirements.

The test result has been evaluated by Shenzhen HTT Technology Co., Ltd laboratory and showed in the test report

The test report number: HTT2020102529F

It is understood that each unit marketed is identical to the device as tested, and any changes to the device that could adversely affect the emission characteristics will require retest.

The following responsible party designated in FCC §2.909 is responsible for this declaration

Company Name:  
 Company Address:  
 Tel:  
 Fax:  
 Email:  
 Signature:  
 Date:

**FCC**

Shenzhen HTT Technology Co., Ltd. Web: www.httgc.com

TEL: 8705-21590208 FAX: 0755-21591201 Hotline: 400-6655-185 Mail: info@httgc.com  
 1F, B Building, Huafeng International Products Industrial Park, Guiba, Baoan Street, Baoan District, Shenzhen, China

**HTT TECHNOLOGY**

## Certificate of Conformity

Certificate No. : HTT202010252R

Applicant : RUAN LINK AUTO ELECTRONICS CO.,LTD  
 4/F,BUILDING 2,NO.168,LUOSHAN 1<sup>ST</sup> ROAD,LUOFENG INDUSTRIAL ZONE,TANGXIA TOWN,RUAN CITY,ZHEJIANG PROVINCE,CHINA.

Address :  
 Manufacturer : RUAN LINK AUTO ELECTRONICS CO.,LTD  
 4/F,BUILDING 2,NO.168,LUOSHAN 1<sup>ST</sup> ROAD,LUOFENG INDUSTRIAL ZONE,TANGXIA TOWN,RUAN CITY,ZHEJIANG PROVINCE,CHINA.

Manufacturer Address :  
 Product : Auto lambda oxygen sensor

LK-SFF 892,  
 LK-WBQ XXX (LSU-4.9), LK-WBQ XXX (LSU-4.2),  
 LK-WCQ XXX (LSU-4.9), LK-WDQ XXX (LSU-ADV),  
 LK-SAF XXX (LSH), LK-SBF XXX (LSH),  
 LK-SCF XXX (LSF-4.2), LK-SDF XXX (LSF-4.2),  
 LK-SFF XXX (LSF-XF), LK-SFF XXX (LSF-4.2),  
 LK-DS XXX, LK-DF XXX, LK-NS XXX,  
 Attention:XXX stands for specific model.

Trademark : LKET

This is to certify that, on the basis of the tests undertaken as per Report No. IEC 202010252CH, the submitted sample of the above item complies with:

IEC 62321-4-2019+A1:2017  
 IEC 62321-5-2013  
 IEC 62321-6-2015  
 IEC 62321-6-1:2015  
 IEC 62321-7-2-2017  
 IEC 62321-8-2017

And fulfills testing requirement of the RoHS directive 2011/65/EU Annex II amending Annex (EU)2015/863 and amending Annex (EU)2017/2102.

**RoHS**

**HTT**  
 Kevin Yang, Senior Manager

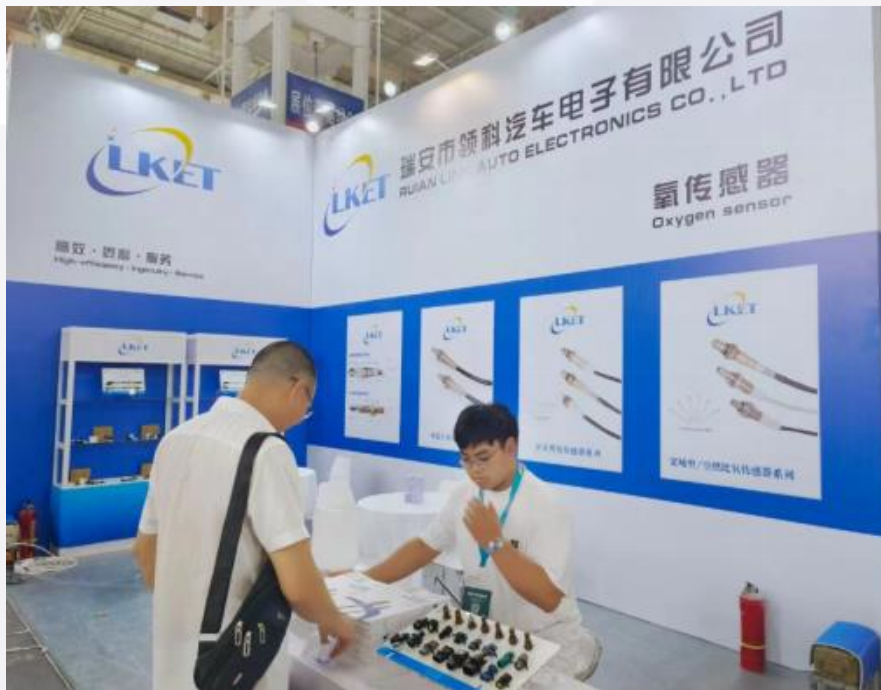
Date of Issue: Oct.30,2020

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 1F, B Building, Huafeng International Products Industrial Park, Guiba, Baoan Street, Baoan District, Shenzhen, China



# 展会EXHIBITION



Auto Aftermarket Guangzhou 2023



Automechanika Shanghai 2023



# 展会EXHIBITION



Automechanika Istanbul 2023



Equip Auto Algeria 2024



## 联系我们(CONTACT US)



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Tangxia Town,Ruian City,Zhejiang Province,CHINA.



[www.link-auto-electronics.com](http://www.link-auto-electronics.com)



合作



共赢

创新

# THANKS

## 谢谢观看