



# SHENZHEN KERUN OPTOELECTRONICS INC. 深圳市科润光电股份有限公司 企业简介

科技兴企, 润泽天下





ABOUT US

ENTERPRISE CULTURE

PRODUCTS AND SERVICES







Company File



Branch

Development History

Organization Chart



R&D Strength



### Company profile



#### Shenzhen Kerun Optoelectronics Inc.



1) established in Sept,2010, with more than 13 years history.

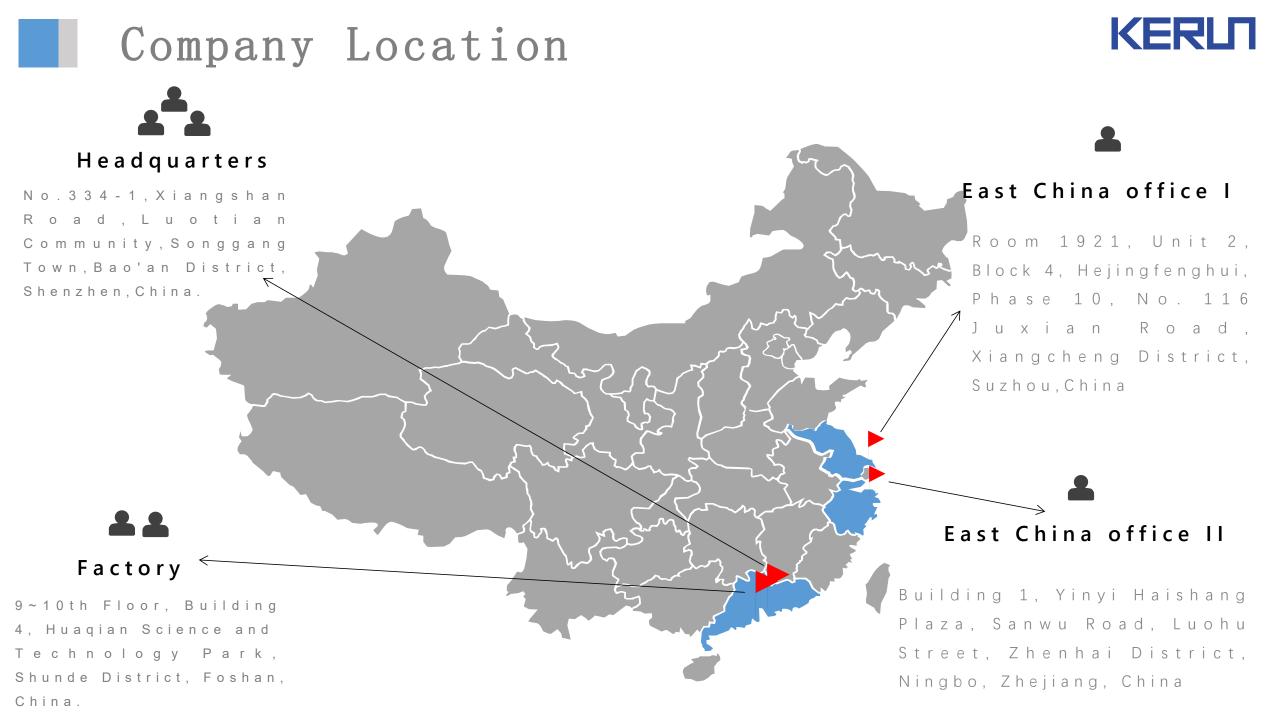
2) covered over 20000 m<sup>2</sup>, 900+ employees.

3) specialized in software and hardware designing, mainly manufacturing standard 7&16 segment, led dot matrix module, customzied led display and led screens,etc.

4) Over 100 advanced automatic production lines of chip bonding and wire bonding; 6 automiatic high-speed SMT production lines. Many kinds of new **test and inspection** equipments.

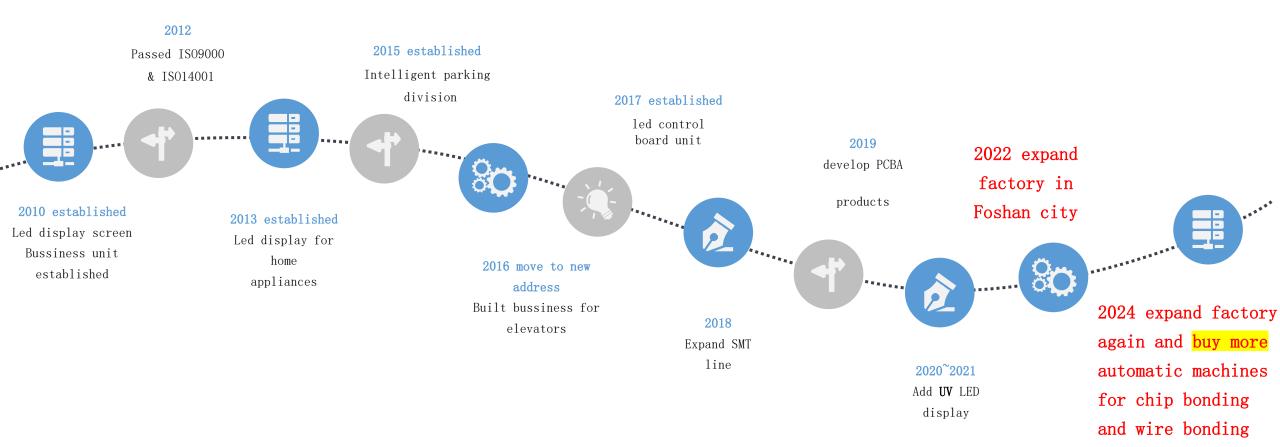
5) Invested a **LCD&TFT factory** with more than 10 years' professional experience.

6) Products are sold worldwide, successfully supporting many well-known enterprises at home and abroad: Panasonic, Whirlpool, Electrolux, Midea, TCL, Jabil, Covos and so on.



### Development History





### Organization Chart







#### CEO:Lin Ming

#### General Manager:FanGuofeng

### Eenterprise Qualifications



National high-tech enterprise

ISO system certification enterprise

Shenzhen high-tech enterprise

 Guangdong "Trustworthy" enterprise





### Eenterprise Qualifications









Patents

#### **REACH ROHS reports**

### R&D Strengths





**42** pcs intellectual property rights

**12** pcs invention patents

**28** pcs utility model patents/appearance patents

**2** pcs brand

**35** R&D engineers

12.7% Proportion

**25** people own bachelor' s degree

**95%** colleague degree



R&D investment is increasing year by year

2021 R&D investment *796369.23* USD

R&D investment amount/Total output value

*5%* or higher.





# Whirlpool SHARP Panasonic JABIL CUCKOO PHLPS 美的 Midea HOIE DēLonghi) Better Everyday **HITACHI** Shark NINJA SUPOR





Company Culture

Company Philosophy

Brand Value

♦ Staff Style

# Company Culture





**Mission:** Science and technology develop enterprise, moisten the world

**Vision** : Being no.1 in the industry with professional techniques. Providing world top service and creating an international brand.

#### Packaging production workshop 1







High-speed automatic die bonder: 120 sets.

Wire bonding machine: 20 sets

### Packaging Production workshop<sup>2</sup>

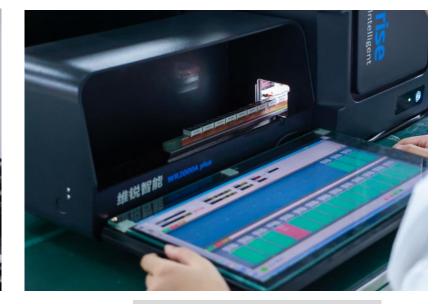




Fully automatic film laminating machine : 25 sets



Fully automatic board splitting/testing/sleeving machine : 10 sets



Online visual tester for finished product appearance : 6 sets

#### SMT production workshop 1





SMT fully automatic high-speed FPC patch production line : 6 Lines



SMT fully automatic high-speed rigid board patch production line : 10 Lines

16 SMT patch lines, equipped with high-precision and fast mounters, SPI, AOI, etc.

### SMT production workshop2



SMT production--AOI testing





GKG fully automatic solder paste printer



Online AOI tester for PCBA semi-finished products



Online solder paste inspection instrument SPI

### **DIP** assembly workshop<sup>①</sup>

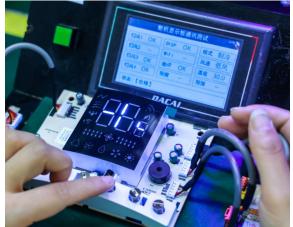




16 DIP assembly lines









Re-measurement of tooling and fixtures

Assembly + FCT test







#### Kerun staff activities



# Products and Services

- Main Products and basic production technology
- Introduction of **featured products**
- Kerun services& advantages
- Kerun' s future developing plan



#### **KERUN Main products**



Integrated LED display module







LED digital display module



LED+LCD Combined module



#### **KERUN Main products**<sup>(2)</sup>





#### Consumer-grade LED display screen



#### **Product features:**

 PCBA: integrated LED display, WIFI, IC drive, touch, buzzer, remote control receiver and other components on one PCB.
touch spring: realize touch function

KERU



Application: Air conditioning small round bead cabinet machine





#### **Product features:**

 1) Integrated led display, including drive IC
2) apply SMT and epoxy-pouring production techonogy.
3)Big size(292mm\*112mm): can display colorful

KERLU

- content and colors.
- 4) Performance is stable and beautiful.

Application: Motorcycle



#### **Product features:**

1) Colorful film: make the icons looks more vivid.

2) touch spring: touch function

3) PCBA board: led display+components on PCB

#### Application: Gas Water Heater



KERLU



#### **Product features:**

three-dimensional film: create 3D realistic ICONS, the color of icons looks gradually varied and vivid.

**Application:** Water Heater



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#### **Product features:**

1) FPC board( flexible PCB), perfectly attached on arched REF.

2) 0402 small white LEDs on FPC, total 230pcs LEDs, **5x46 dot matrix**, small size can display English words.(size :about 77x35mm)

KERLU

3) Integrated 2pcs **imported small volume** driver IC and touch film, realize 230 LEDs can be lit at the same time, and touch function.

4) soft black mask with holes cover the LEDs, LED can be lighting through the hole.

5) touch film: with touch function, customer can turn on/off the machine, and also choose the coffee they want.

#### Application: Coffee machine



#### **Product features:**

 Integrated led display, drive IC and touch function on one led display
touch film: realize touch function
Film color is displaying beautiful.

KERU



#### Application: Hand-held mite remover(手持除螨仪)

#### **Product features:**

 1) Integrated led display, drive IC, touch function and software on one led display
2) touch film: realize touch function

#### Application: intelligent closestool(智能马桶)



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#### **Product features:**

UV module: apply Deep UV LED, wavelength:
270nm~280nm, 120° wide viewing angle, superior
ESD protection.

2) Function: sterilization and disinfection

3) Due to **coronavirus** disease, this kind of UV modules are widely **applied in home appliances**.

#### Application range:

- \* Personal hygiene 个人卫生
- \* Portable devices 便携设备
- \* Water disinfection 水消毒
- \* Surface disinfection 表面消毒
- \* Air disinfection 空气消毒

**Specific application**: air conditioner, air purifier, humidifier, Intelligent sanitary ware, laundry rack, floor scrubbers, dust mite controller, etc.



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#### Application: intelligent closestool(智能马桶)



Application: air outlet of air conditioner



FND SMD led digital display



Product features:

- 1) Ultra thin thickness: about 3~4mm
- 2) REF can bear 275°C high temperature
- 3) **Reel tape packing**, easy for mounting on PCB by automatic SMT machine.

KERI

- 4) Solder pad is more stable for welding, good for conductive and heat dissipation
- 5) face color: gray or black
- 6) 2, 3, 4, 5, 6 digits can be made up by single digit
- 7) **custom SMD type led display** is made based on customers' requirements.

Application: precise instrument, etc.

custom SMD led digital display

# Led dot matrix display module(small size) KERLN

| Item No.      | Picture | Specification   | Color  | Polarity  |
|---------------|---------|---|--|---|
| KRM-757CUR    |         | module size: 17.8*12.7*6.3(mm)<br>Dots: 7*5=35dots<br>pixel diameter: 1.9mm<br>pixel pitch: P2.54mm | red(other colors are<br>optional)                      | common cathode<br>(common anode is<br>optional) |
| KRM-788AW     |         | module size: 20*20*5.9(mm)<br>Dots: 8*8=64dots<br>pixel diameter: 1.9mm<br>pixel pitch: P2.5mm      | white(other colors are<br>optional)                    | common cathode<br>(common anode is<br>optional) |
| KRM-1388AW    |         | module size: 32*32*8(mm)<br>Dots: 8*8=64dots<br>pixel diameter: 3.0mm<br>pixel pitch: P4.0mm        | white(other colors are<br>optional)                    | common cathode<br>(common anode is<br>optional) |
| KRM-1588AW    |         | module size: 37.7*37.7*7.2(mm)<br>Dots: 8*8=64dots<br>pixel diameter: 3.7mm<br>pixel pitch: P4.75mm | white(other colors are optional)                       | common cathode<br>(common anode is<br>optional) |
| KRM-1988AW    |         | module size: 48*48*9(mm)<br>Dots: 8*8=64dots<br>pixel diameter: 4.8mm<br>pixel pitch: P6.0mm        | white(other colors are<br>optional)                    | common cathode<br>(common anode is<br>optional) |
| KRM-2388AURPG |         | module size: 60.5*60.5*8.5(mm)<br>Dots: 8*8=64dots<br>pixel diameter: 5.0mm<br>pixel pitch: P7.62mm | red and pure-green(other<br>colors are optional)       | common cathode<br>(common anode is<br>optional) |
| KRM-151616CUG |         | module size: 40*40*3.9(mm)<br>Dots: 16*16=256dots<br>pixel diameter: 1.7mm<br>pixel pitch: P2.5mm   | yellow-green( red,yellow,<br>amber color are optional) | common cathode<br>(common anode is<br>optional) |

2) single color, bi-color and tri-color are optional (contact Kerun for details)

### Elevators/Lifts & Parking led display



#### Lifts' display board

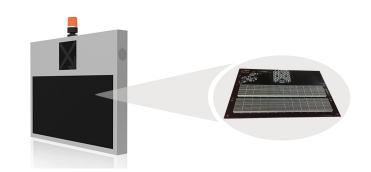




# Parking Spaces display guidance screens



**High-speed toll booth screen** 



### Led dot matrix display screen

#### Application in train or train station



Train screen

Ticket screen

Platform screen

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### Bus information led screen















Bus side screen

Bus front screen

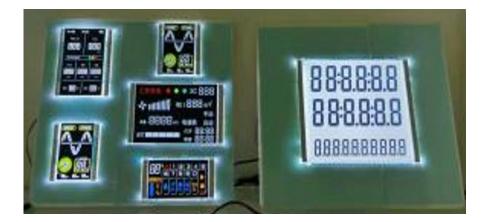
LED stop sign

### LCD display module





**TN/HTN** products



LED backlight module products

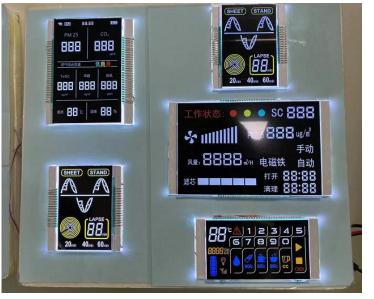


STN products



VA full view products

# Colorful TFT display module



\* Features: Good brightness, high contrast, strong sense of hierarchy, bright color, full of technology sense.

\* Application: digital products, household appliances, car, and other related high fields.







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### Kerun services

1. **Prompt resonse:** We will reply all the inquiries and questions within 24 hours.

 Fast delivery: 2-7 working days for sample, 12-15 working days for MP order.

3. **On site service**: We can support on site service no matter it is in China or abroad, to assistant customers for their product designing or developing.



### Kerun advantages

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1.**Standard establishment:** "Display board design and inspection enterprise standards", "Lighting digital tube & screen enterprise standard", "PCB LAYOUT design specification" and "Led screen design specification".

2. Strict testing and tracking management for shipment:

twice 100% testing for all products; make sample-testrequirement for every production lot.

3. **cost reducing:** optimize the structure of products and raw materials, find more and more qualified materials suppliers to help our customers low down the cost.( Every change must be admitted by customer in advance.)



### Kerun future developing plan

KERL

 Expand the market area, consolidate the domestic market, and fully move into the international market.
In the next 3-5 years, the annual sales revenue will grow at a rate of no less than 20%, specializing in providing solutions for the global control industry.

# 2. Constantly improve the product structure, enrich the product chain.

According to customer needs, we constantly develop products with Kerun characteristics, novel technology, unique performance, stable quality and competitive advantages in the market, and occupy the market.

3. Kerun will uphold the original intention, forge ahead, apply sophisticated technique, rank the industry No.1, and continue to provide more high-quality products and services for our partners!





