UNESD

深圳联合净界科技有限公司

SHENZHEN UNESD TECHNOLOGY CO.LTD

VECTOR
https://vectorvina.vn/

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01

ABOUT US

Brand story

Shenzhen Unesd Technology Co., Ltd. is committed to being the world's leading R&D, manufacturing and service provider of electrostatic protection and ESD intelligent IoT systems. We are the pioneer who developed online intelligent electrostatic control system in the world. Its purpose is to systematically solve electrostatic hazards and comprehensively improve quality control and refined management of intelligent manufacturing, serve the national strategy of Modern Industry 4.0, and provide value services for the construction of smart factories and digital workshops in key areas.

The pioneer of ESD intelligent IoT management system

Pioneer in industrial wireless network data transmission

Professional solution provider for overall electrostatic prevention and control solutions

Capability

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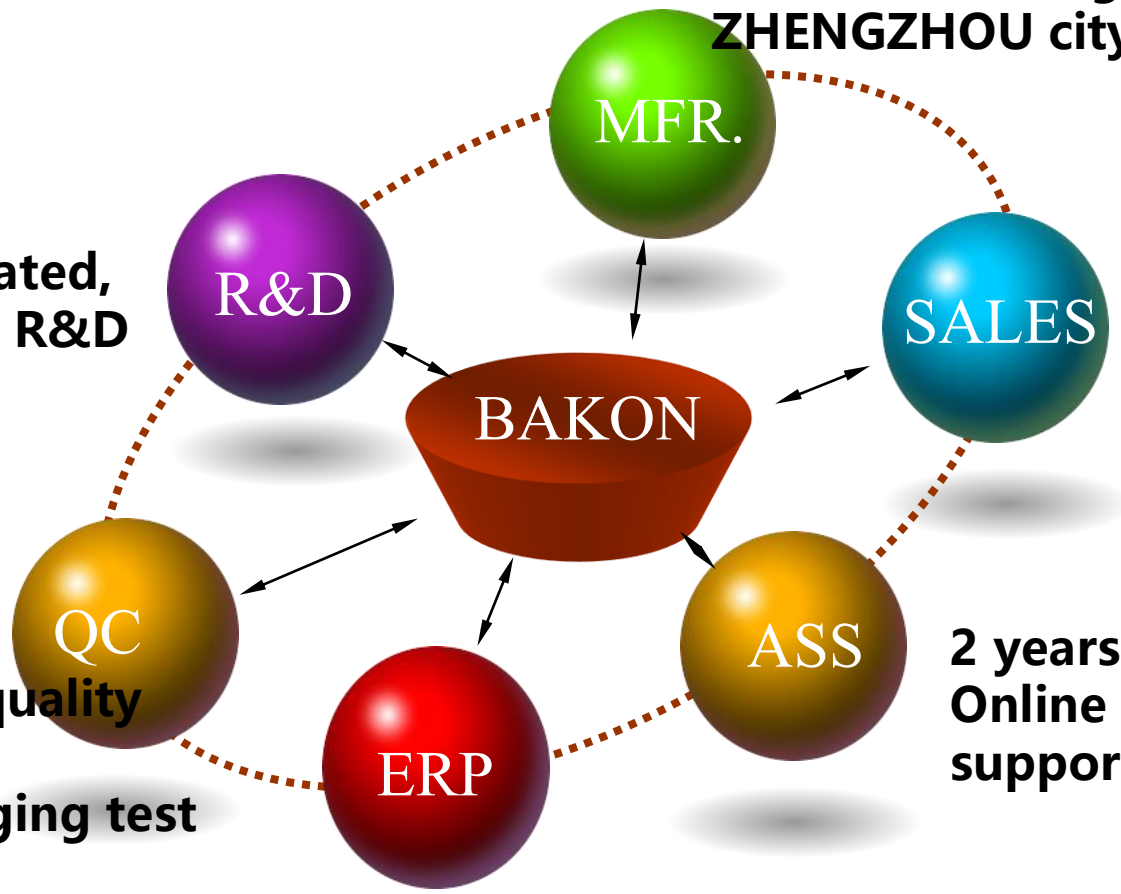
A whole building factory in ZHENGZHOU city

Professional team, Distributor all over the world

Highly educated, high-quality R&D team,
Possess 269 patents



2 years Warranty
Online video call support

Professional quality department
72 hours of aging test
Vibration test

The systematic customer management system can accurately arrange
and release the customer's order requirements,
and the order status can be traced

Patents

02 ESD CONTROL SOLUTION

Solution

Professional ESD overall solution to solve ESD and EOS issues such as R&D, manufacturing process, testing, and warehousing.

ESD protection

Intelligent access control, air shower room, temperature and humidity, ESD item control (reduces the creation of ESD).

- ESD AC — ESD门禁(M)
- Shower — 风淋室(AS)
- TH-Calc — 温湿度(C)
- Car — 物流车点检(L)
- Static floor
- Ground pile

ESD elimination

Intelligent ion blower and air rod (solve CDM model problems)

- Ionizer1 — 离子风机-1(F)
- Ionizer2 — 风机2
- Ionizer3 — 离子风机-3(F)
- Ionic — 平衡度(P)
- Ion Bar — 吸顶离子棒(A)
- Ion Bar — 离子风棒(B)
- Charge — 残留电荷(D)

ESD monitoring

Intelligent ground monitoring, leakage voltage monitoring (solve HBM, MM model problems)

- Equip — 设备接地(E)
- Wrist — 腕带接地(W)
- Rubber — 台垫接地(T)
- Strap — 脚跟带(H)
- Voltage — 漏电电压(V)
- Screwdriver — 电动螺丝刀(S)
- TC — 温控

地图式界面实时监控

1.2 ESD SOLUTION

1. Wristband not worn → ESD protection failed.
2.Wristband alarm non-functional → ESD uncontrolled.
3.No data output → unreliable records.

Smart Solution

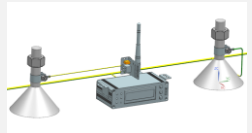
1、 Photoelectric sensor detects absence → alarm until corrected.
2、 Single alarm triggers for any wristband anomaly (system-wide alerts).
3、 Real-time data logging → historical queries for traceability & improvement.

1.Mat grounded via table/floor → poor reliability.
2.No grounding alarm → uncontrolled risk.
3.No resistance monitoring for mats/shelves.

Smart Solution

1、 Mat connect with grounding wire through monitor U103-S → optimal ESD performance.
2、 Integrated into ESD system → real-time monitoring & alerts.
3、 Real-time resistance tracking for all grounded surfaces.

1.No visual ground tags → loose/detached wires.
2.No alarms for ground faults → ESD/EOS risks.



Smart Solution

1、 Clear ground labels + U103-S monitor connection → high reliability.
2、 ESD system integration → instant alerts for anomalies

1.3 ESD SOLUTION

1. Other brand Ionizer: No network monitoring → uncontrolled ESD.
2.No parameter adjustment → rigid settings.
3.Manual maintenance → inefficient.

Smart Solution

1. Intelligent ionizers adopts wireless IoT monitoring + real-time data display (LED screen).
2. On-device parameter customization + auto-cleaning function.
3. Reduces CDM risks from insulating materials.

Thermometer and Hygrometer

1. Manual data entry → error-prone.
2. No warnings → delayed fixes
3. No traceability → no root-cause analysis.

Smart Solution

1. Auto-saved data + smart alerts for anomalies.
2.Database storage → historical analysis & traceability.
3.Wireless control for humidifiers → auto-adjustment.

1.High leakage voltage → PCB damage.
2. No alarm for poor ground.

Smart Solution

1.Real-time leakage voltage tests → EOS/ESD prevention. 2.ESD software live monitoring + dashboard display.

ESD wireless networking

To achieve the technical requirements of Industry 4.0, ESD IoT technology is stable and meets the intelligent monitoring of more than 30 types of electrostatic control products.

Use Zigbee wireless industrial IoT to achieve interference-free, ESD big data sharing, email, SMS and other technical tracking.

Use data to quantify unknown parameters, solve blind zone control through intelligent control, and use the most suitable products to complete ESD controllable production

03

PRODUCTS

Smart transceiver

U002 is a gateway that connects the Internet and ZigBee network. It can convert Ethernet data to ZigBee network and can be widely used in smart home, asset management, building environment monitoring and other fields.

Basic parameters

ZigBee side parameters

Wireless transmission rate: 250Kbps, 500Kbps and

1Mbps Optional wireless transmission power: 22dBm

Actual

data throughput: 10KB/S

Ethernet parameter

interface: RJ45, 10/100M Adaptive

protection: built-in 2kV surge

protection Supported

protocols: ETHERNET, ARP, IP, ICMP, UDP, TCP, HTTP, DHCP, DNS

Other basic

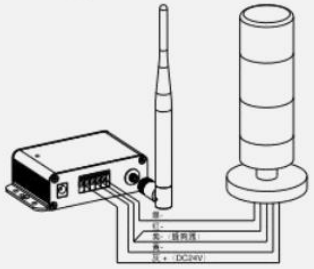
parameters Power supply:

+6-24VDC Power

consumption: 0.54W@9V Channel: 13-26, staggered civil WIFI

channels, anti-interference coverage: radius 35m-50m without obstruction, recommended maximum monitoring points 200

Smart Alarm



电源适配器

Specifications

Model	U100-B
Power	Input : DC24V 1A
Operating environment	Anti-Static Environment , -5~45℃
Max consumption power	2W
Indicator status	Normal: Green ; Anomalous: Red ; Standby: Orange
Dimension	90(L)×60.5(W)×30(H)mm
Weight	≈0.13kg

Smart grouding monitor system

3 IN 1
Grounding device

wrist strap socket

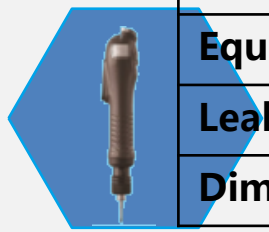
Photoelectric Sensor

W grouding

M grounding

E grounding

V grounding



✸Modular Design

Plugable wrist strap, ESD mat, equipment,leakage voltage modules for flexible ESD zone configuration

✸Digital Monitoring

Dual-loop resistance monitoring compliant with ANSI/ESD S20.20-2021,
Real-time data display (0.1 precision) with audible/visual alarms for threshold breaches,
2.4G wireless connectivity for traceability and historical data queries

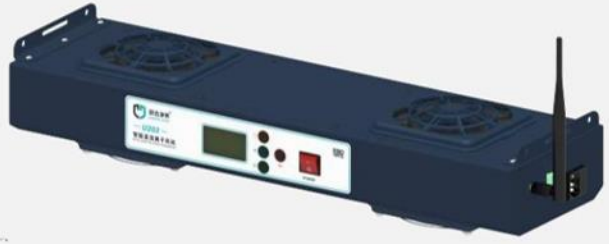
✸Dual-Ground Isolation

Isolates static ground from equipment ground for broader facility compatibility

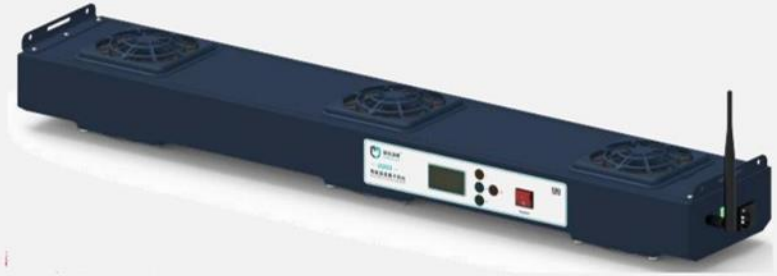
Model name	U103-S PRO
Power supply	9V/1A，3W
Wrist strap module	750K-45MΩ adjustable，default 35MΩ
ESD Mat module	1-100MΩ adjustable，default 100MΩ
Equipment module	1-50Ω adjustable，default 4Ω
Leakage voltage module	1-1000mV adjustable，default 20mV
Dimension	125(L)*65(W)*40(H)mm

Intelligent DC ion blower

U201 single fan ion blower



U202 two-fans ion blower



U203 three-fans ion blower

High-performance

DC ion blower with strong static electricity elimination capability. At a distance of 30cm, the static voltage of ±1000V can be dissipated to within ±100V in just 1.2S. The balance can be within ±5V.

Highly intelligent

Balance detection function, real-time sound and light alarm, 2.4G wireless networking, real-time monitoring

Highly convenient

Power-on cleaning and regular cleaning, extending maintenance time and saving labor. Snap-on design of front and rear covers, easy to clean, power off when opening the cover, safe and guaranteed. Plug-in launch pin, easy to replace, long service life of the whole machine

Model	U201/U202/203
Power supply	220V/50Hz, power 20W/45W/70W
Single outlet air volume	0-95CFM, five levels adjustable
Ion balance	within ±5V
Static elimination time	≤1.2S
The single air outlet area	40*90cm2
Alarm threshold	Default balance -35V—+35V

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Intelligent AC ion blower

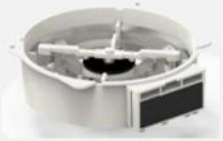
U301/301E single fan

U302/302E two- fan

U303/303E three- fan

Fan

Filter cotton



Launcher E-type heating plate

Anti-dust king

AC ion fan, integrated protective structure, efficient dust-proof, easy to replace, good anti-static effect, long range of action

Intelligent upgraded

Power on self-test, early warning, wireless network monitoring, balance alarm, data query and traceability

Model	**U301/U302/U303**
Power supply	**220V/50Hz, power 20W/40W/65W**
Air volume	**0-95CFM, five levels adjustable**
Ion balance	**within ±15V**
Static elimination time	**≤1S**
The single air outlet area i	**40*90cm²**
Alarm threshold	**Default balance ±35V**

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Micro Ionizer

Specifications:

Model	BK501
Input voltage	DC24V
Power	12W
Operating temperature	-5°C~45°C
Working humidity	< 75%RH
Air volume	95CFM maximum (adjustable)
Ion balance	±15V
Static elimination time	≤1.5s (30CM)
Effective coverage area	35*90CM
External dimensions	176.5L*145W*80H
Weight	≈1.2/1.4kg

ESD test results:

Operating voltage	DC 24V		
Voltage	1KV-100V		
Ambient temperature	25°C		
Test distance (CM)	30	60	90
Static elimination time (S)	1.5	3	6
Ion balance (V)	0±10	0±8	0±6
Wind speed (1-5level)	5	5	5

※The test results will vary due to the humidity and cleanliness of the test environment. Static elimination time (without dust filter).

Horizontal ion blower

Specifications:

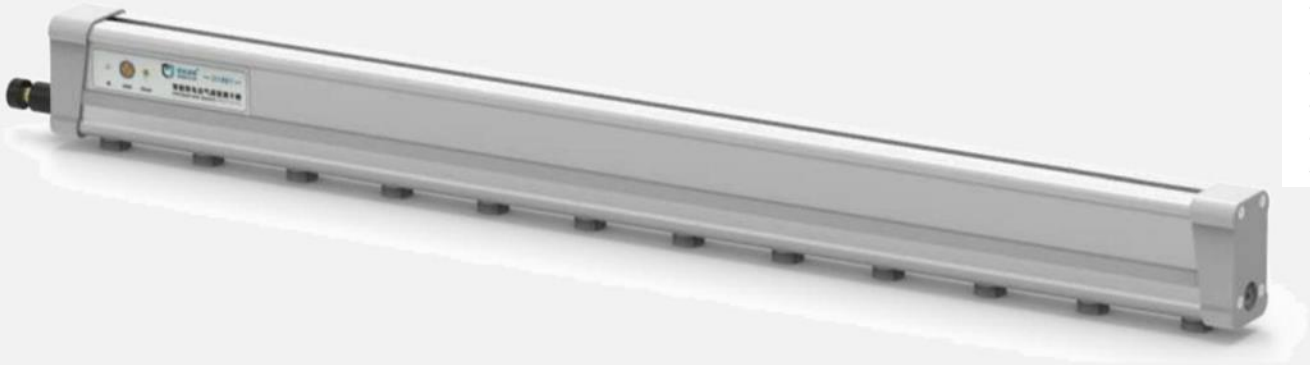
Model	ESD IOT XC2
Input voltage	AC 100-240V,50/60Hz
Power	25W
Air volume	Maximum 105CFM (adjustable)
Ion balance	0±15V
Static elimination time	≤1s (1000-100V ,30cmWorking distance maximum wind speed)
Effective coverage area	100*150cm²
Working humidity	< 75%RH
Operating temperature	-5°C~45°C
Dimension	366L*158.5W*183.5H
Net weight/gross weightTT	≈2.7kg/3.2kg

ESD test results:

Operating voltage	AC 230V				
Testing voltage	1KV-100V				
Ambient temperature	25°C				
Test distance (CM)	30	60	90	120	150
Static elimination time (S)	1	2	3	5	6
Ion balance (V)	0±10	0±10	0±8	0±8	0±6
Wind speed (1-5 Level)	3	3	3	3	3

Wire output ionizer

Ionizer Bar



Specifications

Model	U1801
Power	DC 24V
Working distance	DC±7KV
Output frequency	0.1Hz;0.5Hz;1Hz;5Hz;20Hz;50Hz(Default);100Hz;
Duty cycle	0%-99%
Power	10W
Working distance	100-1000mm
Ion balance	≤±30V(10cm,No Air)
Electricity discharge	≤2S
Air pressure	≤0.6MPa
Throttle valve air supply connector	Φ8-G1/8 Black
Operation temp	0℃-50℃
Operation humidity	<70%RH
Bar length	385-410(Distance25mm);460-2960(Distance50mm)

Intelligent temperature and humidity meter

U101
Intelligent Hygro-Thermometers

Model U101 is a 2.4 G wireless data transfer hygro thermometer. It features highly accurate and stable, low power consumption, large volume data storage, built in alarm. It combines technologies in multiple areas such as, computing, sensor and communication. Widely applied to aquatic, food industries and pharmaceutical areas, storage, blood storage, agricultural research, manufacturing, environmental control, infection and epidemic prevention, laboratory, construction, museum and greenhouse, etc.
Model U101 transfers data with 2.4 GHZ wireless connection within 30Meters. Imported digital sensor. Highly accurate measurement. It is a better choice for a replacement of traditional thermometers.

Components

Hygro thermometer (portable equipment, sensor, wireless module) + wireless radio station + Software + computer(customer self-supplied) .

Recording

- A: Computer record: connect with computer, interval recording setting, real time monitoring on computer.
- B: Thermometer equipment record alone: Without connecting to computer, it will record up to 12 times (1, 3.....11pm) automatic record data in set environment.
- C: Support USB/TF, and data store live.

USB external storage

Power Adaptor

Specifications

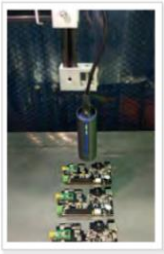
Model	U101
Power	Input : 5V/1A
Operating temp.	-10~50℃
Operating humidity	10-99%RH(No condensation)
Accuracy	Temperature:±0.3℃ ; Humidity:±5%RH
Max power	0.5W
Alarm light status	Normal: Green ; Anomalous: Red ;
Dimension	115(L)×80(W)×30(H)mm
Weight	≈0.26kg

Surface voltage Meter

Product features

- Supporting dual channel static sensor devices. Sensor can be installed inside a host, testing static charge in particular environment.
- Wireless 2.4G data delivery, data collecting and saving, analyzing
- Adjust static voltage, once it's over the standard setting, warning lights on and alarm will be heard.
- Manual adjusting communication address via each channel.
- Can adjust any testing distance by switching the power.
- With a distance of 10-500mm static electricity coverage and accurate testing result.
- Can be operated in multiple languages.

In Use



Sensor

Specifications

Model	U102-A
Power	Input : DC12V/2A
Standby time	5s
Working temp and humidity	Temperature : -5-45℃ ; Humidity : 30-65%RH
Testing range	±18000V
Alarm coverage	10-5000V
Testing distance	10-500mm
Testing accuracy	±5%
Noise	<10dB
Volume	95 (L) x58(W)x42(H)mm
Weight	≈250g

Dust particle counter

LCD large screen display

Alarm Output

Intelligent networking

U115A

Multiple detection particle sizes

Detect 0.3μm, 0.5μm, 1.0μm, 3.0μm, 5.0μm, 10.0μm and other dust particle sizes, wired network monitoring

Multiple detection modes

The product has a variety of detection modes to choose from, including concentration/L, concentration/ft 3, Concentration/m³, differential mode, accumulation mode, suitable for ten levels to one million levels Dust-free workshop testing requirements

High detection accuracy

The air sampling flow rate is 2.83L/min, and the relative error of particle size accuracy ≤±30%.The relative standard deviation of repeatability is ≤±10%, meeting the national standard.

Model	U115A
Power supply	180V-240V
Working environment	5-45℃ ， ＜90%RH
Dimensions	65(W)*156(H)*120(D)mm
Net weight/gross weight	680g/≈802g
Working current	280 mA (screen bright)/200 mA (screen dark)
Stand-by current	170 mA (screen bright)/90 mA (screen dark)

PM2.5 air quality detector

Multiple detection particle sizes

Can detect PM0.3, PM0.5, PM1.0, PM2.5,

Particulate matter concentration of PM5.0 and PM10

Dual metering mode

Weight mode: ug/m³ (micrograms/cubic meter) Counting mode: PCS/L (pieces/liter)

Multiple data detection

Simultaneously measure temperature, humidity, dust particles, and monitor wirelessly

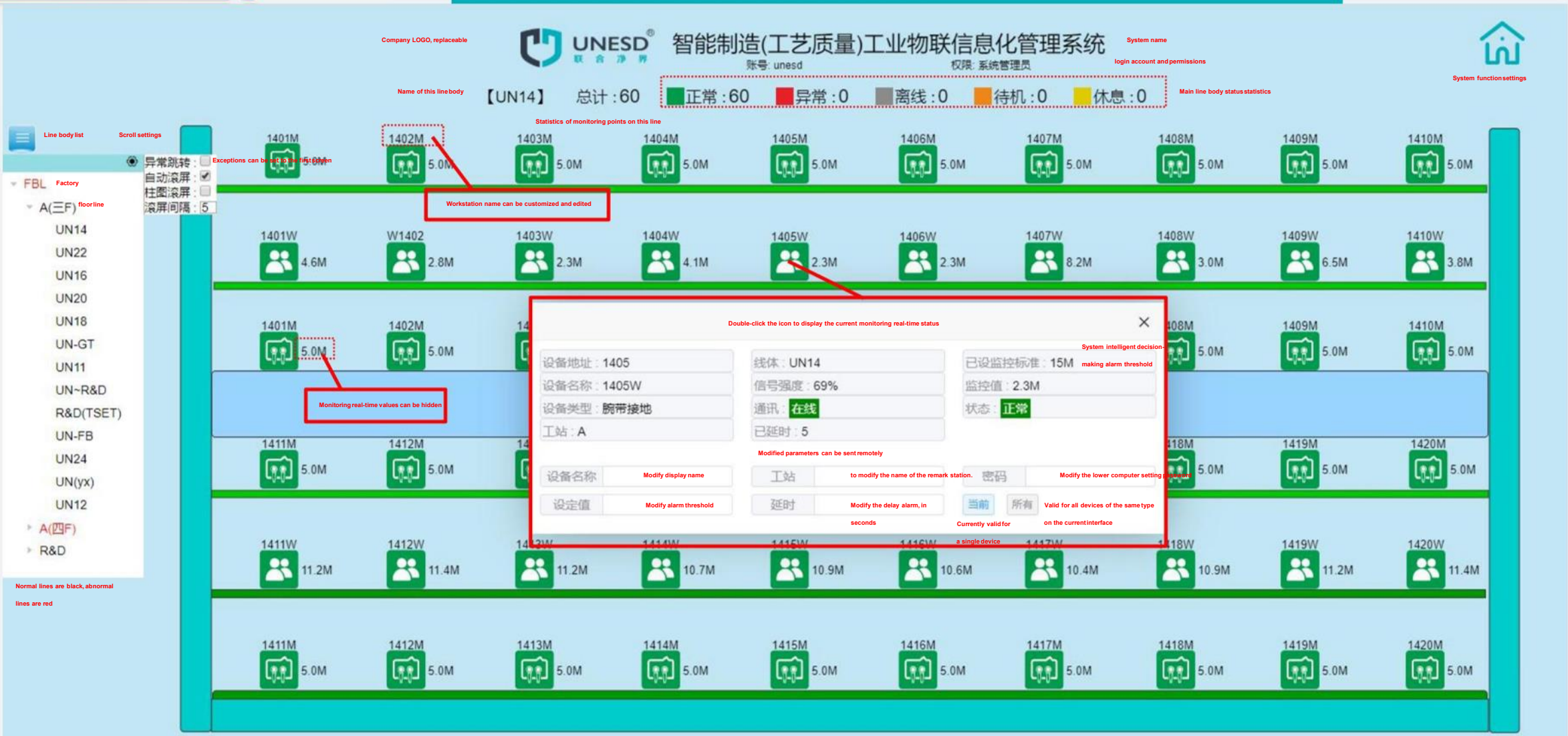
Device name	PM2.5 Intelligent Air Quality Monitor (U105)
Power supply	Input: 5V/1A
Working environment	-10~60℃, 0-99%RH non-condensing
Dimensions	120(L)×98(W)×32(H)mm
Net weight/gross weight	≈0.52kg

System functions

It is not just about solving a point or a surface problem, but solving a problem in a field.

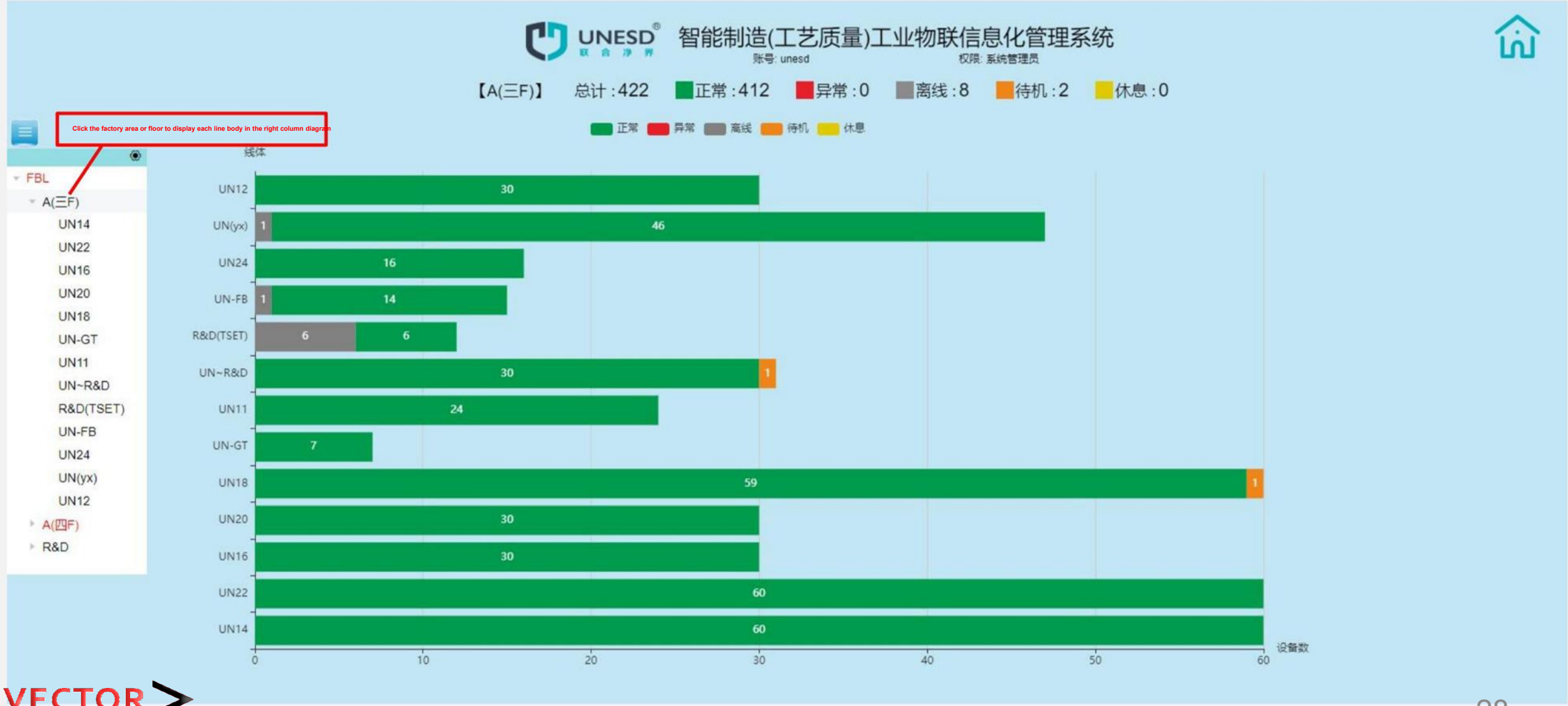
Monitoring interface

Simple, aesthetic and powerful ESD on-site management interface, user-friendly operation. Monitoring can be remotely password locked and set parameters are issued to achieve fast and standardized management.



Monitoring interface

The column chart compares and displays the status of each line, which is aesthetically intuitive and visually displayed



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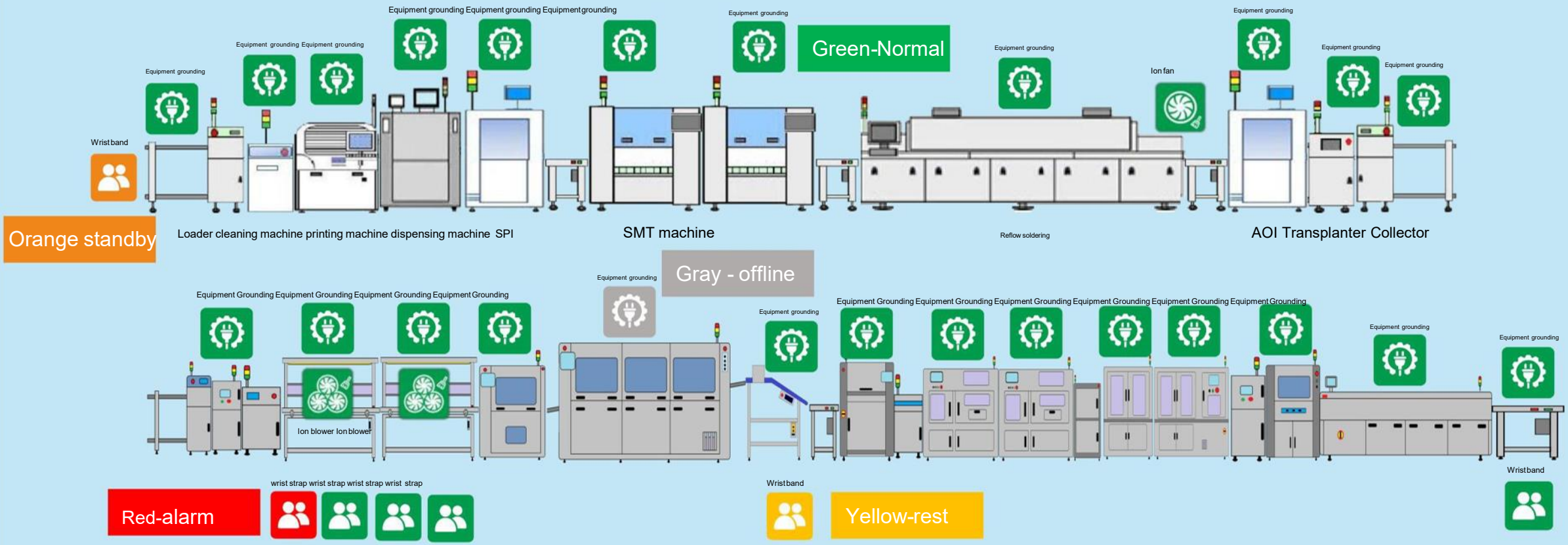
On-site map management

Status is displayed numerically, and different statuses are displayed in different colors, making it more intuitive and easy to distinguish.



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Information management data dashboard

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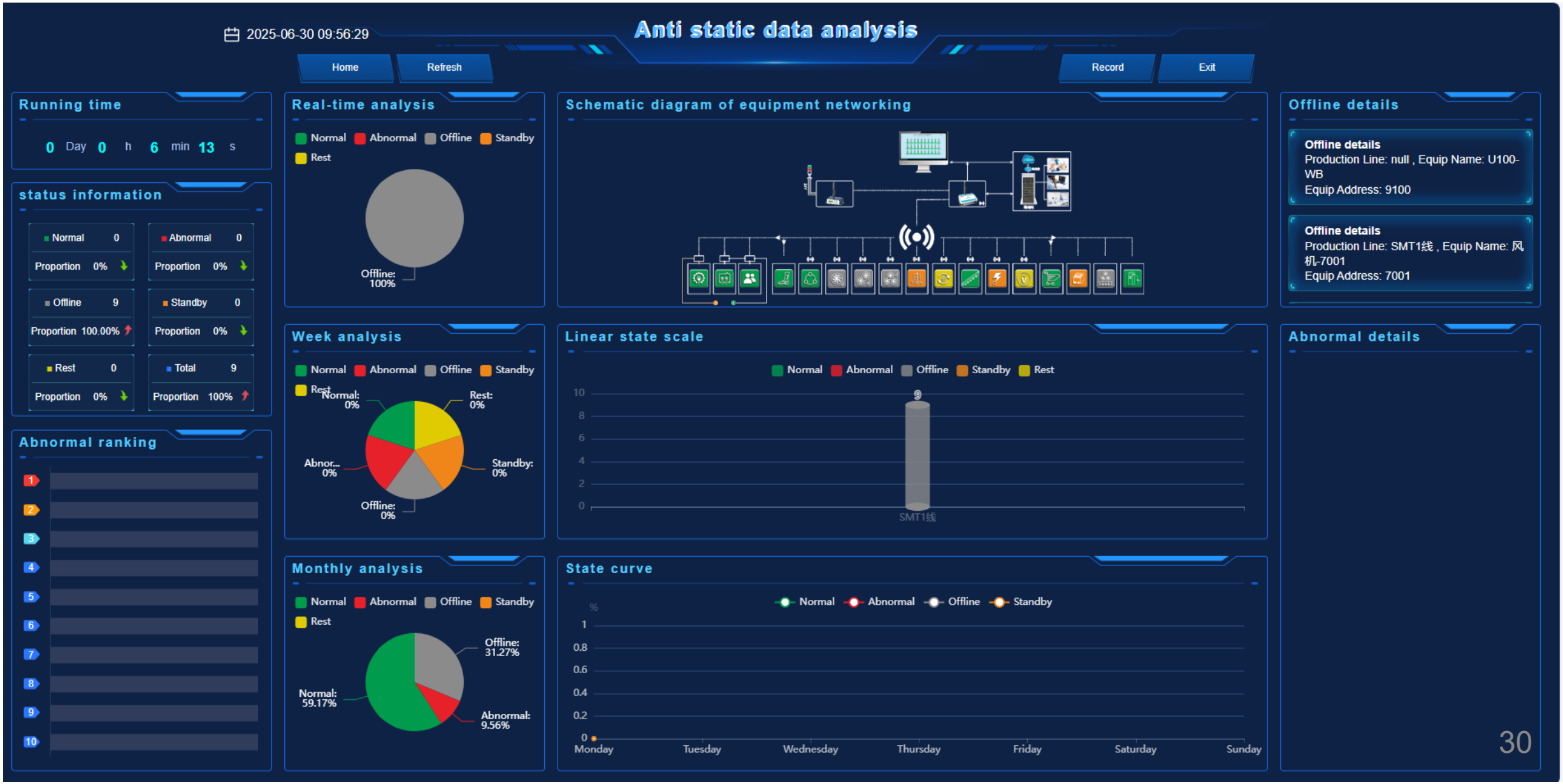
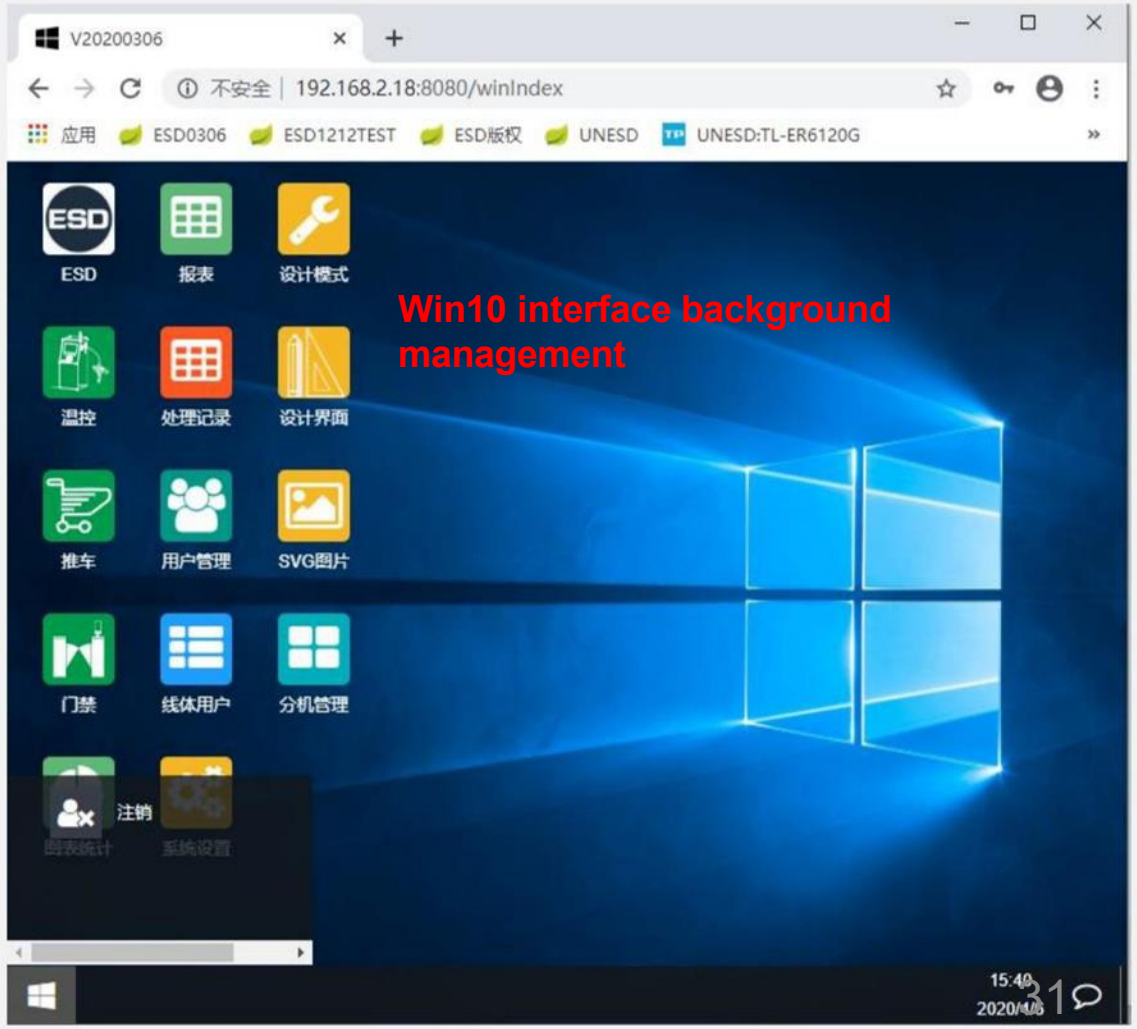


B/S structure + Win10 interface

B/S structure modular programming design, easy to log in to the syste mmanagement. The background management interface is the latest Win10 interface icon version, which is visually beautiful and easy to operate.



Map interface layout

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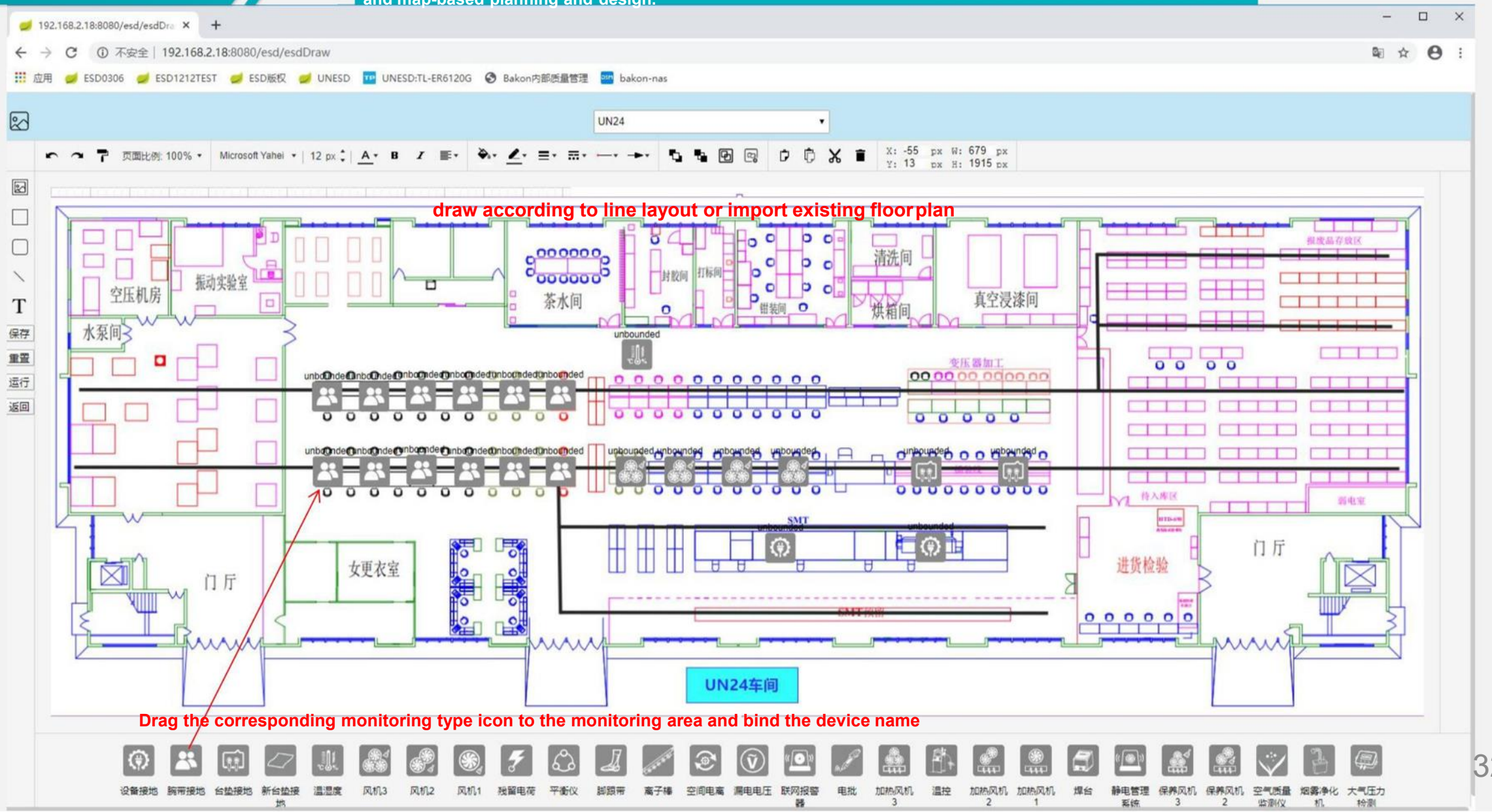
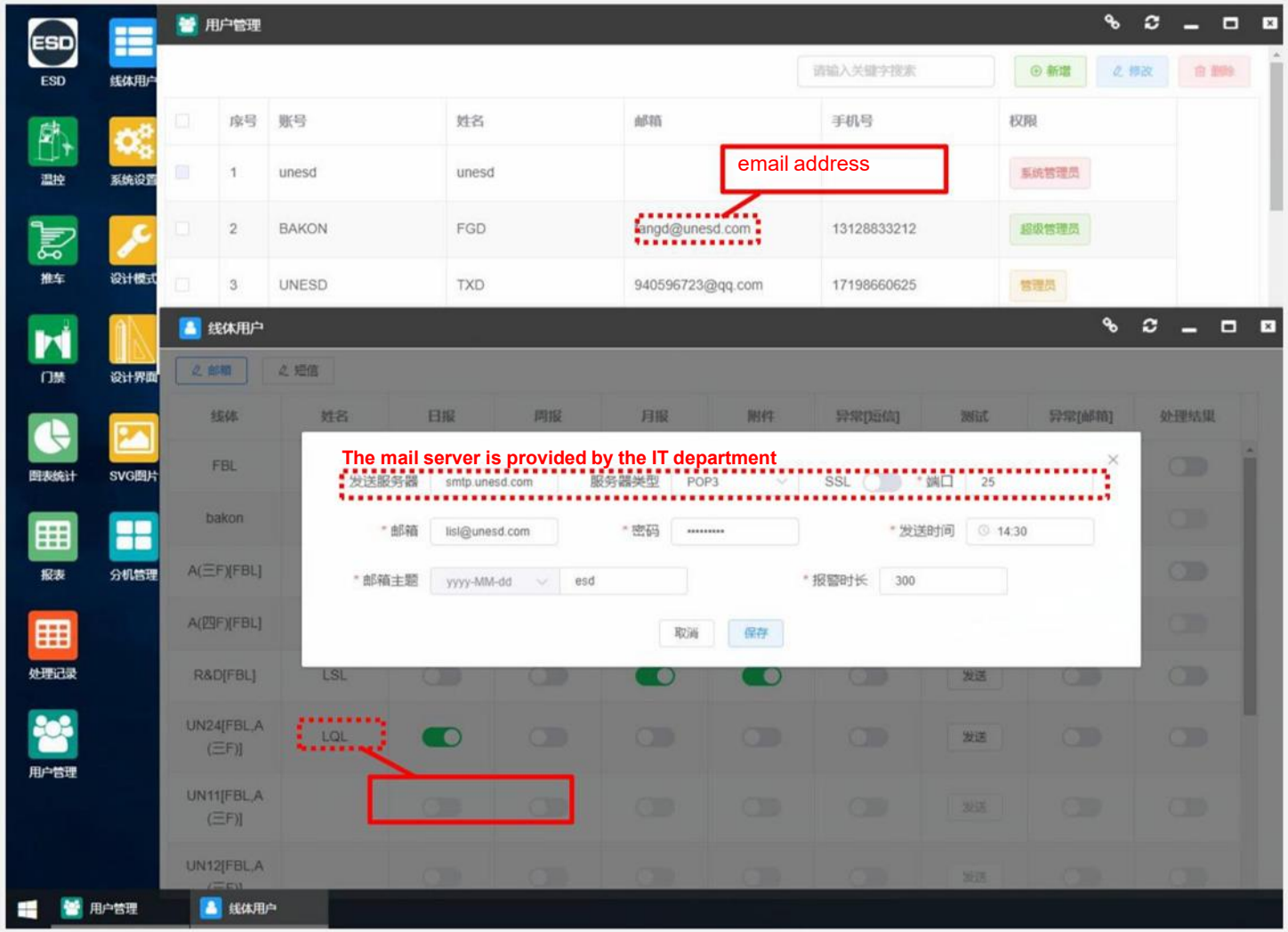
The monitoring interface can be adjusted according to the production process rectification, customized layout, and map-based planning and design.



Email push settings

User hierarchical management, mail hierarchical classification, reporting on time



Description of user categories and permissions:

System administrator:

Super administrator:

Administrator:

Operator:

Email description:

Abnormality: If the switch is in the green state and the alarm duration is set to 300, it means that the abnormality has not been handled for over than 5 minutes. It will send an email . If it is still not handled after 10 minutes, send the email a second time, and so on.

Daily report: Send report statistics at a specified time every day.

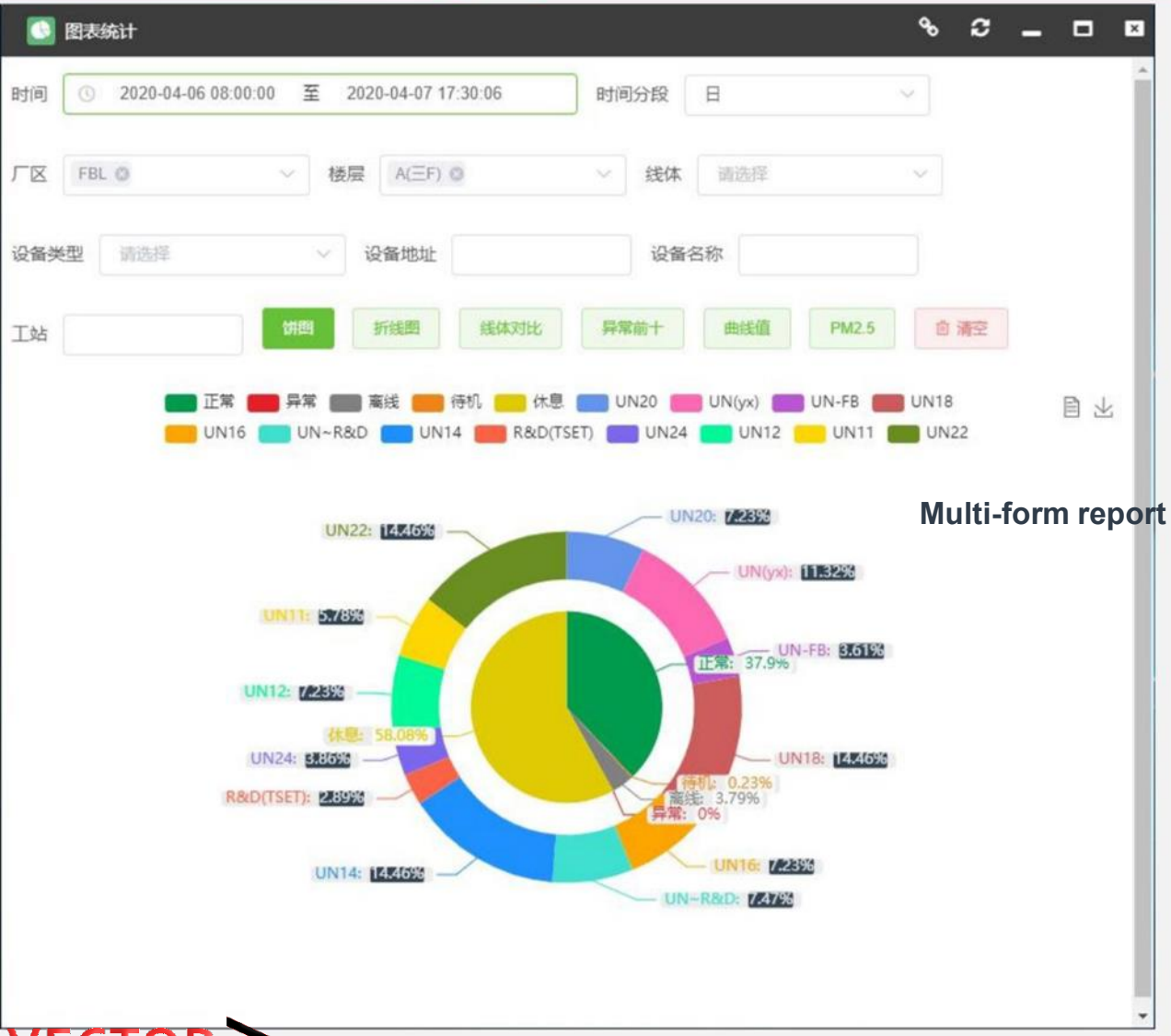
Weekly report: Send report statistics every Monday at the specified time.

Monthly report: Send report statistics at the specified time on the 1st of every month

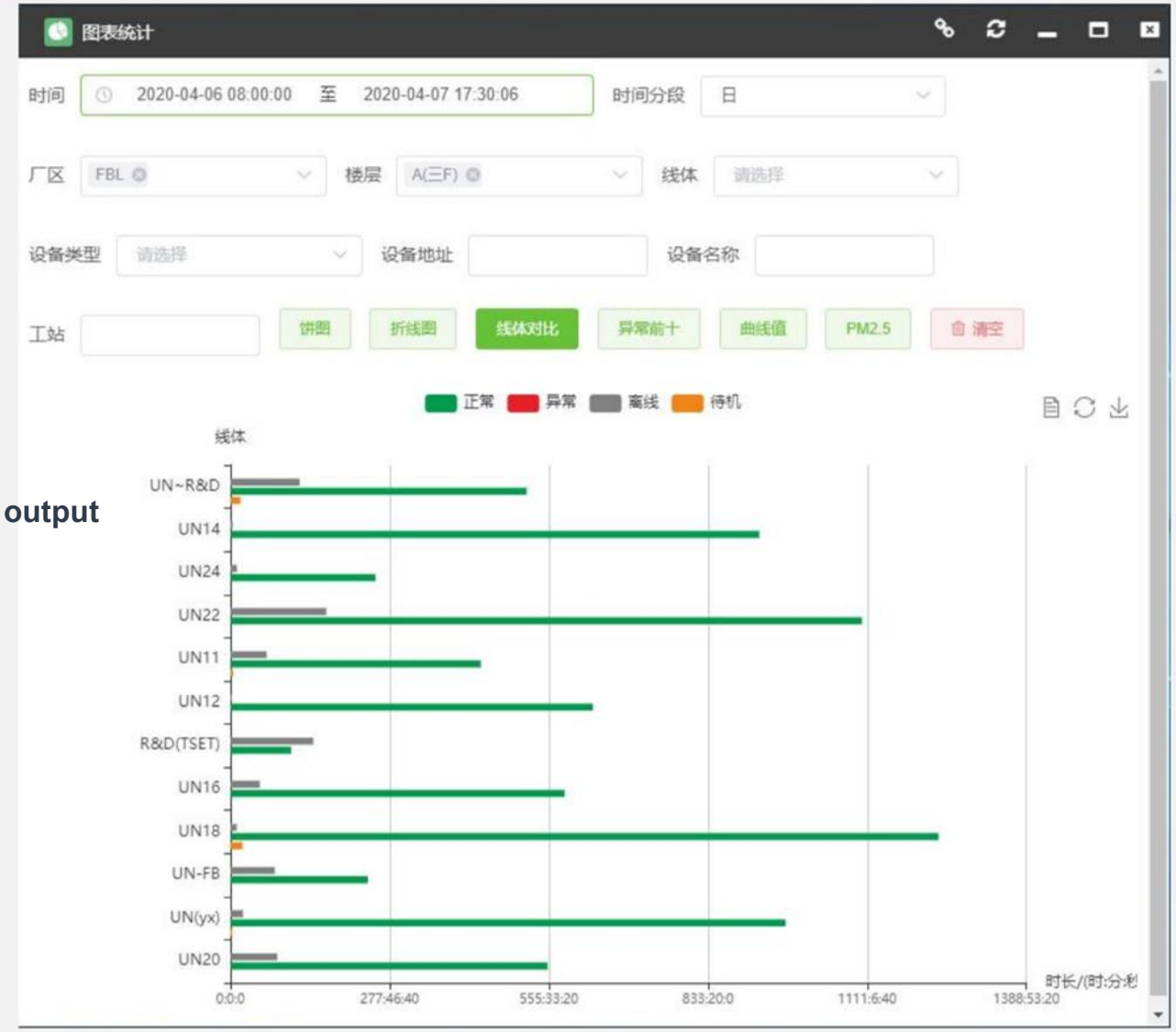
.

Automated statistical analysis

It can support queries with any condition or combination of conditions, and output various types of graphical reports (line chart, pie graph, bar chart).



Multi-form report output



Report output

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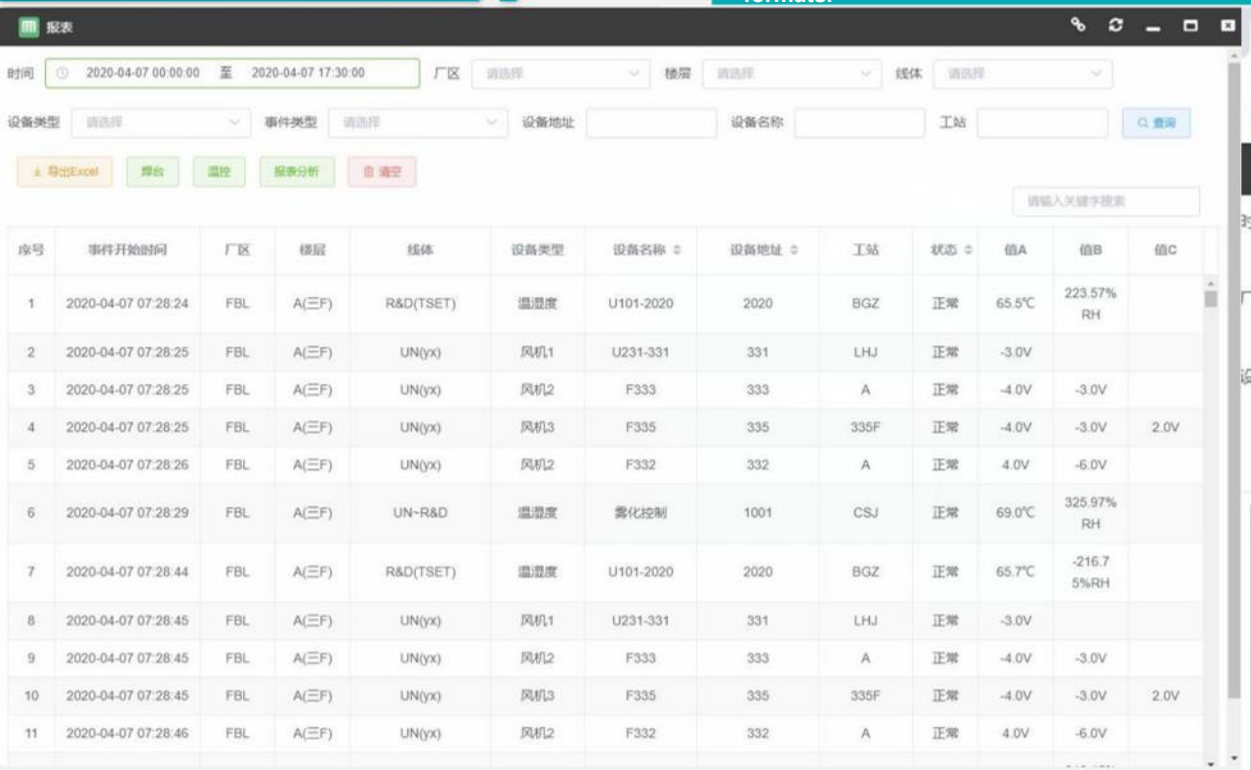
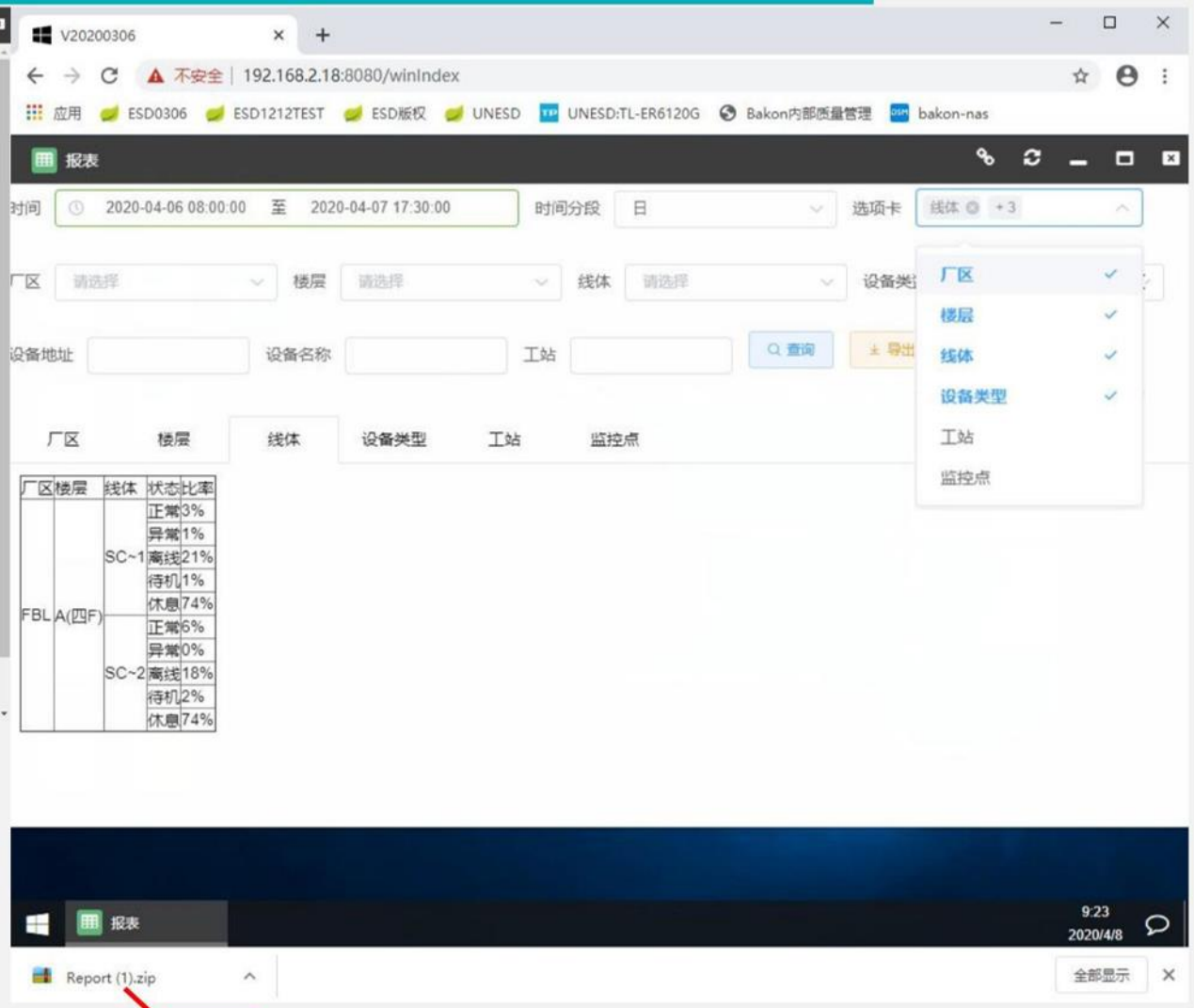
It can support queries with any condition or combination of conditions, and the data can be exported to EXCEL and various formats.





Report export

ORACLE

MySQL

Microsoft Excel

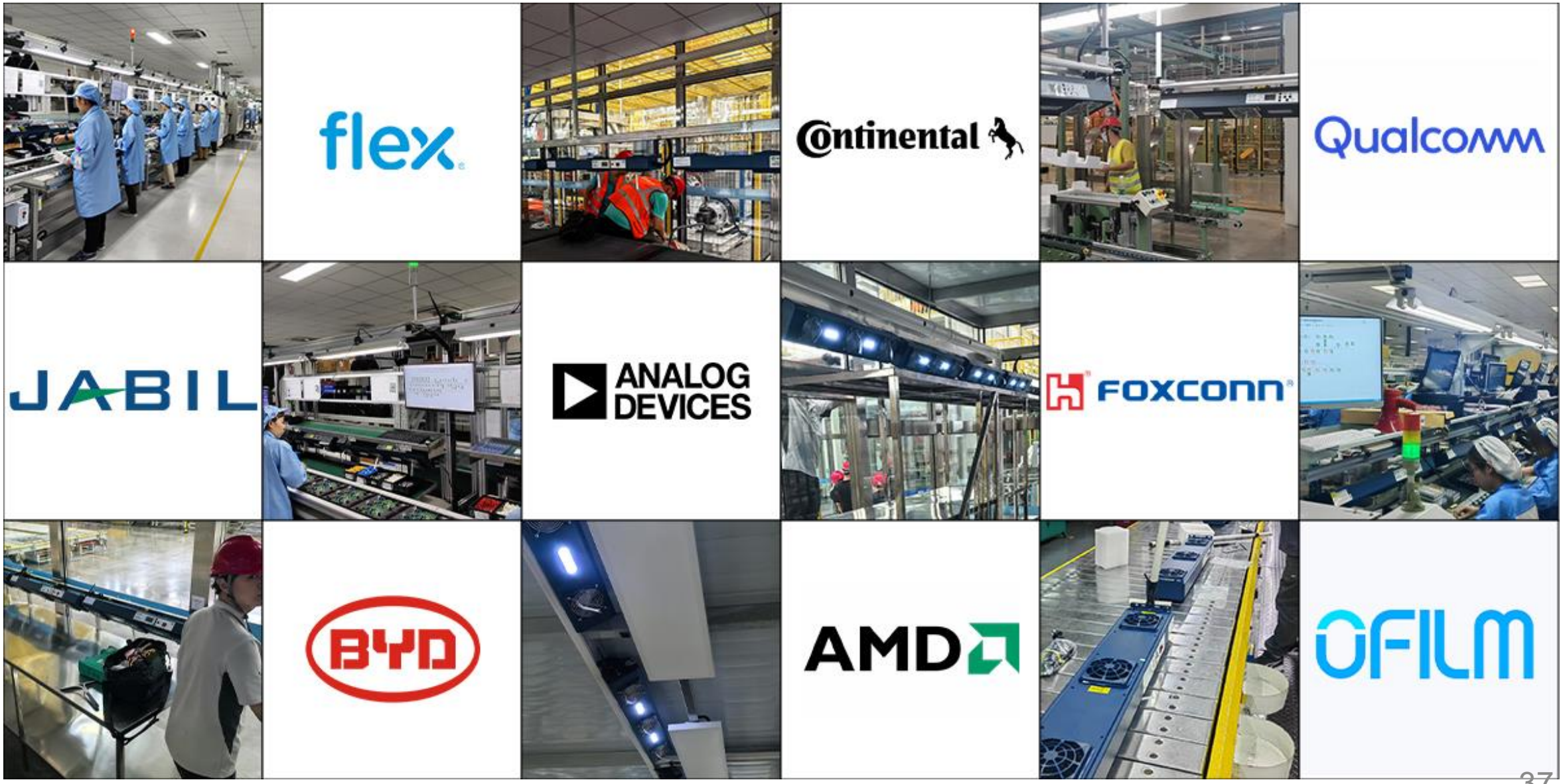
System data docking

Supports data docking with MES, SPC and other systems. The ESD system can open corresponding parameter data interfaces and obtain relevant data through corresponding instructions.

ESD数据接口输入说明				
接口	参数（类型）	允许为空	参数描述	备注[例]
主机IP:8080/getAllData				获取全部设备的实时值 [127.0.0.1:8080/getAllData]
主机 IP:8080/getDataByLineId	id（String）	否	线体id	获取某条线体下绑定的所有设备的实时值 [127.0.0.1:8080/getDataByLineId?id=23]
主机IP:8081/getDataById	id（String）	否	设备id[序号+位置(添加设备时获取设备类型出现的位置，第一格就是1)]	获取某个设备的实时值 [127.0.0.1:8080/getDataById?id=2551]

ESD数据接口输出值说明		
key	说明	备注
id	设备id	输入参数设备id
address	设备地址	
name	设备名字	
type	设备类型id	
status	设备状态	
line	线体id	
position	工位	
value	实时值	
lineName	线体名称	

Cases and customers



Cases and customers

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oppo	xiaomi	Skyworth	Hisense	Haier	AUO	
SUNWODA ENERGY	LG Energy Solution	长城汽车 Great Wall Motors	Greenway 博力威	TF 通富微電 TONGFU MICROELECTRONICS CO., LTD.	EVE 亿纬锂能	廣達電腦 Quanta Computer
GEELY	CHANGHONG 长虹	华天科技 HT-Tech	UNESD	TCL 华星光电 CSOT	BOE	ZTE
GREE	CATL				阳光电源 SUNGROW	LUXSHARE ICT 立讯精密
TRULY® 信利	MACMIC®	TOYOTA		Whirlpool®	華潤微电子 CR MICRO	Inventec
KONKA	AUX AIR CONDITIONER	Midea®	SIEMENS Healthineers	mindray	OMRON	HUAWEI

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