



产品图册

PRODUCT BROCHURE

深圳市泰信智能电子有限公司

SHENZHEN TECHTION SMART ELECTRONICS CO.,LTD

公司简介

COMPANY PROFILE

泰信智能隶属于深圳市丽台电子有限公司（简称丽台电子），是丽台电子于2024年创立的整机事业部。泰信智能依托丽台电子至2015年创业以来积累的技术、资源和管理经验为客户提供量身定制的低碳环保触摸显示终端解决方案。

我们的战略定位：以低碳、节能和护眼的新型显示技术赋能加速各领域产业数字化转型，助力数字，经济创新和可持续发展。我们为垂直市场设计和制造、销售各类工业电脑一体机、工业显示器和阳光屏显示终端，尺寸涵盖7.0英寸110英寸，产品主要应用于智慧工业，智慧交通领域。

Techtion Smart is affiliated to Shenzhen Leadtek Electronics Co., Ltd. (referred to as Leadtek), and is the complete machine division founded by Leadtek in 2024. Relying on the technology, resources and management experience accumulated by Leadtek since its establishment in 2015, Techtion Smart provides customers with tailor-made low-carbon and environmentally friendly touch display terminal solutions.

Our strategic positioning: to accelerate the digital transformation of industries in various fields with low-carbon, energy-saving and eye-protection new display technologies, and to promote digital, economic innovation and sustainable development. We design, manufacture and sell various AIO Panel PC, Industry Monitor and Eco-Friendly Display Terminal for vertical markets, with sizes ranging from 7.0 inch to 110 inch. Our products are mainly used in smart industry and smart transportation fields.



品牌介绍

BRAND INTRODUCTION

01 经营理念 / Business Philosophy

- ▶ 以技术创新引领高质量发展

Leading high-quality development with technology innovation

02 企业文化 / Company Culture

- ▶ 愿景：显示绿色智慧生活

Vision: Display Green Smart Life

- ▶ 核心价值观：诚信，共享，共担，共赢

Core Value: Integrity, Sharing, Shared Responsibility, Win-Win

- ▶ 使命：您可信赖的低碳环保显示终端解决方案合作伙伴

Mission: Your Reliable ECO-Friendly Display Terminal Partner

03 核心优势 / Core Advantages

- ▶ 产品：产品符合未来行业市场发展需求；全品类定制化、尺寸涉及7.0” -110 “

Products: Products meet the future market development needs of the industry; all categories are customized, and the sizes range from 7.0" to 110"

- ▶ 资源：具有强大的资源整合能力，可以优化配置各种资源，提高效率和降低成本

Resources: With strong resource integration capabilities, various resources can be optimally allocated to improve efficiency and reduce costs

- ▶ 资质：全系列产品线均通过ROHS,CE,FCC等国际产品认证

Qualification: All product lines have passed ROHS, CE, FCC and other international product certifications

- ▶ 服务：灵活，高效，专业

Service: flexible, efficient, professional

智慧工业

SMART INDUSTRY



外嵌款显示器

External Embedded Monitor

非触摸/电容触摸可选

Non-touch/capacitive touch optional
OS:Android /x86/monitor

支持宽温宽压

Supports wide temperature and wide Voltage

1、轻薄/美观/散热性强

Thin/beautiful/heat dissipation

2、整机全封闭式无风扇设计

The whole machine is completely enclosed without fan design

3、IP65 防尘防水标准

IP65 dustproof and waterproof standard

4、性能稳定，支持全天运行

Stable performance, support all-day operation

5、整机采用铝合金材质一体压铸制成

The whole machine is made of aluminum alloy

6、具有良好的抗震性和抗冲击性

It has good shock resistance and impact resistance

壁挂款显示器

Wall mounted Monitor

非触摸/电容触摸可选

Non-touch/capacitive touch optional
OS:Android /x86/monitor

支持宽温宽压

Supports wide temperature and wide Voltage

1、纯平板达IP65防水

Flat panel up to IP65 dust and waterproof

2、圆角窄边框，精美不易划伤

Rounded and narrow border, exquisite and not easy to scratch

3、整机全封闭无风扇设计

The whole machine is completely closed without fan design

4、低功耗/集成度高/稳定性好

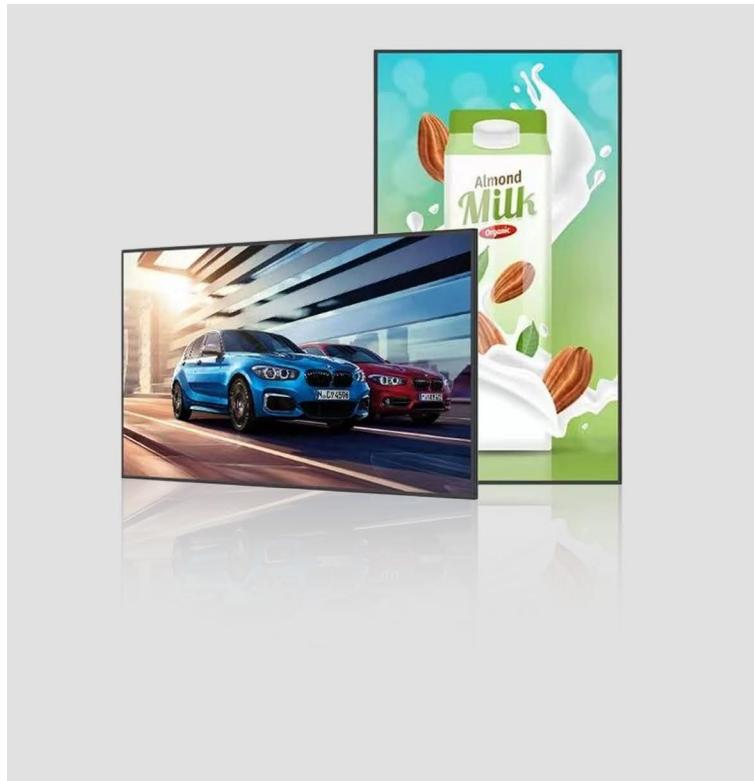
Low power consumption/high integration/good stability

5、丰富的多元化输入接口

Rich diversified input interface

6、铝型材包边，铝合金材质良好的抗震性和抗冲击性

Aluminum profile cladding, aluminum alloy material good shock





内嵌款显示器

Built-in Embedded Monitor

非触摸/电容触摸可选

Non-touch/capacitive touch optional
OS:Android /x86/monitor

支持宽温宽压

Supports wide temperature and wide Voltage

- 1、嵌入贴合美观，2.5mm矮阶窄边面板
Embedded and fitted beautifully, 2.5mm low level panel with narrow sides
- 2、灵活拓展，满足市场上各种外设连接需求
Flexible expansion to meet the needs of various peripheral connections in the market
- 3、高清还原，触控流畅，耐磨耐冲击
HD restoration, smooth touch, wear resistance and impact resistance
- 4、双重防脱落设计，避免接触造成故障
Double anti-fall design, avoid contact caused by failure
- 5、多重工业防护，7*24H的持久稳定性能
Multiple industrial protection, 7*24H durable and stable performance

不锈钢工业显示器

Stainless Steel Industrial Monitor

非触摸/电容触摸/电阻触摸

Non-touch/Capacitive touch/Resistive touch

支持宽温宽压

Supports wide temperature and wide Voltage

- 1、整机采用SUS304材质,产品符合NEMA4标准,IP67防尘防水
SUS304 material, product complies with NEMA4 standard,IP67 dustproof and waterproof standard
- 2、整机全封闭式无风扇设计,散热性强, 节能静音
The whole machine is fully enclosed and fanless design, strong heat dissipation, energy saving and quiet.
- 3、外形美观/耐盐雾腐蚀/耐高低温/耐磨损/易清洗
Beautiful appearance/salt spray corrosion resistance/wide temperature/wear resistance/easy to clean.
- 4、接口插座全部采用航空插座
All interfaces and sockets are aviation sockets.
- 5、多重工业防护, 7*24H的持久稳定性能
Multiple industrial protection, 7*24H durable and stable performance



安卓平板电脑

ANDROID PANEL PC

TS-A-CWK



Provide API
reference Code support SDK
Secondary development
customization



External
3.5mm
Headphone
jack



It's 7-21.5 inches
Multiple sizes
available



Reserve jaw and
horn holes Speaker
and LOGO required
Screen printing
can be quickly
implemented Product
upgrade

10.1"/10.4"/11.6"/12"/13.3"/15"/15.6 "/17"/17.3 "/18.5"/19 "/21.5" Multisize options,support other sizes customization

CPU	Standard:RK3288Cortex-A17 quad-core 1.8GHZ	Optional:RK3399 Cortex-A17 Hexapore 1.8GHZ
GPU	Mail-T764 quad-core	Mail-T860 quad-core
Internal storage	2G(optional,maximum support 4G)	4G
Storage	16G(32G optional)	32G
operating system	Android/Linux	Android
Bluetooth	BT4.0	BT4.0
WiFi	2.4G	2.4G
Support customization	4G module,Bluetooth,GPS,MIC(optional)	4G module,Bluetooth,GPS,MIC(optional)
Support	RTC real-time clock,timing switch,network wake up	RTC real-time clock,timing switch,network wake up
Operating temperature	-20°C-70°C	Installation methods:wallmounted,desktop,embedded,cantilever,boom,etc
Storage temperature	30°C-80°C	Power input:Support 12V-36V wide voltage power input
operating humidity	20%~95%(relative humidity without condensation)	Impact resistance:10g acceleration,11ms cycle
Touch type	Capacitive touch	Vibration resistance:519HZ/1.0mm amplitude;19200HZ/1.0g acceleration
clicks	Capacitance>50 million times	EMI/EMC interference detection standards

TS-A-CBK



10.1"/10.4"/11.6"/12"/13.3 "/15"/15.6"/17"/17.3"/18.5"/19"/21.5"Multi-size options,support other sizes customization		
CPU	Standard:RK3288Cortex-A17 quad-core 1.8GHZ	Optional:RK3399 Cortex-A17 Hexapore 1.8GHZ
GPU	Mail-T764 quad-core	Mail-T860 quad-core
Internal storage	2G(optional,maximum support 4G)	4G
Storage	16G(32G optional)	32G
operating system	Android/Linux	Android
Bluetooth	BT4.0	BT4.0
WiFi	2.4G	2.4G
Support customization	4G module,Bluetooth,GPS,MIC(optional)	4G module,Bluetooth,GPS,MIC(optional)
Support	RTC real-time clock,timing switch,network wake up	RTC real-time clock,timing switch,network wake up
Operating temperature	-20°C -70°C	Installation methods:wallmounted,desktop,embedded,cantilever,boom,etc
Storage temperature	30°C -80°C	Power input:Support 12V-36V wide voltage power input
operating humidity	20%-95%(relative humidity without condensation)	Impact resistance:10g acceleration,11ms cycle
Touch type	Capacitive touch	Vibration resistance:519HZ/1.0mm amplitude;19200HZ/1.0g acceleration
clicks	Capacitance>50 million times	EMI/EMC interference detection standards

X86电脑平板电脑

X86 COMPUTER PANEL PC

TS-P-CWK



Support ACC extension Turn the machine on and off avoid No machine burn



External 3.5mm Headphone jack



It's 7-21.5 inches Multiple sizes available

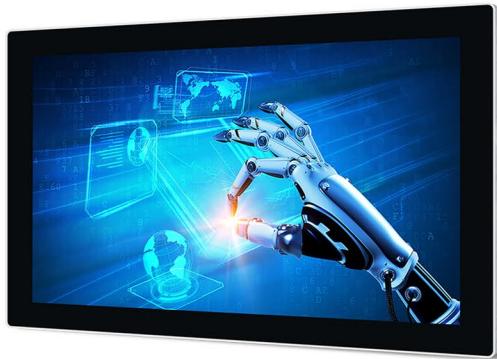


Reserve jaw and horn holes Speaker and LOGO required Screen printing can be quickly implemented Product upgrade

10.1 "/10.4"/11.6 "A2"/13.3 "/15"/15.6"/17"/17.3"18.5"/19"/21.5"Multi-size options,support other sizes customization

CPU	Standard: Intel@Celeron J4125 2.0GHz quad-core	Optional : Intel@Core i3-i5-i7 8/10 generation
GPU	Integrated core graphics card	Integrated core graphics card
Ram	4G(optional,Max 8G)	8G(optional,up to 64G)
Storage	64G SSD(optional 128G,256G,512G,1T)	128G SSD(optional 128G,256G,512G,1T)
operating system	Windows/Linux,ubuntu	Windows/Linux,ubuntu
Bluetooth	ALC888/ALC6626-channel hi-fi audio controller	Onboard ALC8976-channel hi-fi audio controller
WiFi	2.4G+5G dual-band	2.4G+5G dual-band
Support customization	4G module,Bluetooth,GPS,MIC(optional)	4G module,Bluetooth,GPS,MIC(optional)
Support	RTC real-time clock,timing switch,network wake up	RTC real-time clock,timing switch,network wake up
Operating temperature	-20°C-70°C	Installation methods:wall-mounted,desktop,embedded,cantilever,boom,etc
Storage temperature	30°C-80°C	Power input:Support 12V-36V wide voltage power input
operating humidity	20%-95%(relative humidity without condensation)	Impact resistance:10g acceleration,11ms cycle
Touch type	Capacitive touch	Vibration resistance:5-19HZ/1.0mm amplitude;19-200HZ/1.0g acceleration
clicks	Capacitance >50 million times	EMI/EMC interference detection standards

TS-P-CBK



Provide API
reference Code support SDK
secondary
development
customization



External
3.5mm
Headphone
jack



It's 7-21.5 inches
Multiple sizes
available



Reserve jaw and
horn holes Speaker
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Screen printing
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10.1 "/10.4"/11.6 "/12"/13.3 "/15"/15.6 "/17"/17.3"18.5"/19"/21.5" Multi-size options,support other sizes customization		
CPU	Standard:Intel@Celeron J4125 2.0GHz quad-core	Optional :Intel@Core i3-i5-i7/10 generation
GPU	Integrated core graphics card	Integrated core graphics card
Internal storage	4G(optional,Max 8G)	8G(optional,up to 64G)
Storage	64G SSD (optional 128G,256G,512G,1T)	128G SSD (optional 128G,256G,512G,1T)
operating system	Windows/Linux,ubuntu	Windows/Linux,ubuntu
Bluetooth	ALC888/ALC6626-channel hi-fi audio controller	Onboard ALC8976-channel hi-fi audio controller
WiFi	2.4G+5G dual-band	2.4G+5G dual-band
Support customization	4G module,Bluetooth,GPS,MIC(optional)	4G module,Bluetooth,GPS,MIC(optional)
Support	RTC real-time clock,timing switch,network wake up	RTC real-time clock,timing switch,network wake up
Operating temperature	-20°C -70°C	Installation methods:wall-mounted,desktop,embedded,cantilever,boom,etc
Storage temperature	30°C-80°C	Power input:Support 12V-36V wide voltage power input
operating humidity	20%-95%(relative humidity without condensation)	Impact resistance:10g acceleration,11ms cycle
Touch type	Capacitive touch	Vibration resistance:5-19HZ/1.0mm amplitude;19-200HZ/1.0g acceleration
clicks	Capacitance >50 million times	EMI/EMC interference detection standards

TS-P-CBX



Strong
shock-resistant
anti-interference
corrosion-resistant



IP67 waterproof
and dustproof



7*24H/50000H



Wide Temperature
-20°C~70°C

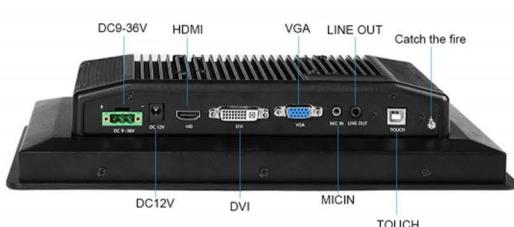
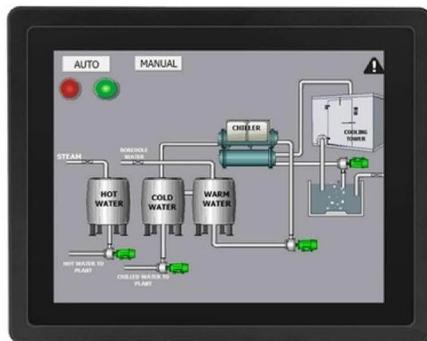
10.1"/10.4"/11.6"/12"/13.3"/15"/15.6"/17"/17.3"/18.5"/19"/21.5" Multi-size options,support other size customization

CPU	Intel®Celeron J6412 @2.0GHz	Optional :Inter core I3/I5/I7
GPU	Integrated Intel®UHD Graphics 600	
Internal storage	8G	optional :Max 16G
Storage	128G SSD	Optional 256G、512G、1T
Operating System	Windows 10	Windows 11/Linux
Network	Realtek8111H/8111G 1000M	
Wifi	Wifi 2.4/5G	Optional :WIFI6
Support Customization	4/5G Moudule,Speaker,GPS,Brightness,Interfaces	
I/O Ports	Aviation sockets:USB/LAN/HDMI /RS232/DC	
Operating Temperature	-20°C~70°C	IP67 dustproof and waterproof standard
Storage Temperature	-20°C~70°C	Installation:wall-mounted/desktop/panel mounted
Operating Humidity	10%~90% RH Non-Condensing	Power input:DC12V (Optional 9-36V /24V)
Touch Type	Capacitive touch	Optional :Non-touch/Resistive touch
SUS304	salt spray corrosion resistance/wide temperature/wear resistance/easy to clean	

工业显示器

INDUSTRIAL MONITOR

TS-M-CWK



Support wide voltage
9-36V, eliminate
voltage instability,
harmonic interference
troubles



Industrial grade
protection
ADAPTS to a
variety of harsh
environments



Heavy industry
style design heavy
industry to build,
dust-proof anti-slip
seismic structure



Independent
research and develop-
ment of industrial
motherboard

10.1/10.4"/11.6"/12"/13.3 "/15"/15.6 "/17"/17.3 "/18.5"/19 "/21.5" Multi-size options,support other sizes customization

Touch parameter	Type	Capacitive touch	Display parameter	Resolution ratio	1920*1080	
	Clicks	Capacitance >50 million times		uminance	400Cd/m2	
	Surface hardness	>7H		Colour	167M	
	Touch strength	45g		Contrast	1000:1	
	Types of glass	Chemically strengthened plexiglass		Visual Angle	89/89/89/89(TYPE)(CR≥10)	
	Pervious to light	Greater than 85%	The following ports are standard monitor ports only			
	power supply	12V/5A external power adapter/industrial terminal	DC Power supply 1	1*DC12V/5.525 socket		
General parameter	performance	100-240V 50-60Hz	DC Power supply 2	1*DC9V-36V/5.08mm Phoenix socket		
	Input Voltage	9-36V/12V	Touch interface	1*USB-B external touch port		
	Anti-static	Contact 4KV-air 8KV(can be customized ≥16KV)	NGA	1*VGA IN		
	Quakeproof	GB242 standard	HDMI	1*HDMI IN		
	Anti interfrunce	EMC/EMI Anti-electromagnetic interference	DVI	1*DVI IN		
	Dustproof waterproof	Front panel IP65 dust and water resistant	PC AUDIO	1*PC AUDIO		
	Operate temperature	Working -20°C- 70°C,store -30°C-80°C	EARP HONE	1*Headset		
			Container loading list	Total weight	4KG	
				Install	Embedded fasteners *4,PM4X30 screws *4	

TS-M-CBK



aluminum alloy



Extended COM touch



Front panel IP65
level waterproof

10.1 "/10.4"/11.6"/12"/13.3"15"/15.6 "A7"/17.3 "/18.5"/19"/21.5"Multi-size options,support other sizes customization

Touch parameter	Type	Capacitive touch	Display parameter	Resolution ratio	1920*1080
	Clicks	Canacitance >50 million times		luminance	400Cd/m2
	Surface	>7H		Colour	16.7M
	Touch strength	45g		Contrast	1000:1
	Types OT glass	Chemically strengthened plexiglass		Visual Angle	89/89/89/89(TYPE)(CR≥10)
	Pervious to light	Greater than 85%	The following ports are standard monitor ports only		
	power Supply	12V/5A external power adapter/industrial terminal	DC Power supply 1	1*DC12V/5525 socket	
General parameter	performance	100-240V 50-60Hz	I/O interface	DC Power supply 2	1*DC9V-36V/5.08mm Phoenix socket
	Input Voltage	9-36V/12V		Touch interface	1*USB-B external touch port
	Anti-static	Contact 4KV-air 8KV(can be customized ≥16KV		VGA	1*VGA IN
	Quakeproof	GB242 standard		HDMI	1*HDMI IN
	Anti interfrerence	EMC/EMI Anti-electromagnetic interference		DVI	1*DVI IN
	Dustproof waterproof	Front panel IP65 dust and water resistant		PC AUDIO	1*PC AUDIO
	Operating temperature	Working -20°C- 70°C,store -30°C-80°C	Container loading list	EARP HONE	1*Headset
				Total weigh	4KG
				Install	Embedded fasteners*4,PM4X30 screws *4

TS-M-CBX



Strong
shock-resistant
anti-interference
corrosion-resistant



IP67 waterproof
and dustproof



7*24H/50000H



Wide Temperature
-20°C~70°C

智慧交通

SMART TRANSPORTATION

公交导乘屏

BUS GUIDE PANEL



产品参数

PRODUCT PARAMETERS

Part No.	TS-280HD	TS-286HD	TS-362HD	TS-401HD	TS-434HD	TS-500HD
Dimensions	730*166.5*53	750*255*53	948*309*53	972*400*53	1108*250*53	1243*356*53
AA Areas	699*131.5	699*201	885*258	941*368	1074*212	1210*321
Resolution	1920*362	1920*553	1920*560	1920*750	3840*758	3840*1019
Contrast	1100:01:00	1100:01:00	4000:01:00	1200:01:00	4000:01:00	1300:01:00
Brightness	500nit	500nit	500nit	500nit	500nit	500nit
View Angle	89/89/89/89	89/89/89/89	89/89/89/89	89/89/89/89	89/89/89/89	89/89/89/89
Power Supply	DC9-36V	DC9-36V	DC9-36V	DC9-36V	DC9-36V	DC9-36V
Operarion System	Android Windows	Android Windows	Android Windows	Android Windows	Android Windows	Android Windows
Application Environment	Bus	Bus	Bus	Bus	Bus	Bus
Max consumption	30W	30W	68W	70W	78W	125W

地铁LCD 动态地图

DYNAMIC MAP OF METRO LCD



产品参数

PRODUCT PARAMETERS

Part No.	TS-280HD	TS-286HD	TS-362HD	TS-401HD	TS-434HD	TS-500HD
Dimensions	730*166.5*53	750*255*53	948*309*53	972*400*53	1108*250*53	1243*356*53
AA Areas	699*131.5	699*201	885*258	941*368	1074*212	1210*321
Resolution	1920*362	1920*553	1920*560	1920*750	3840*758	3840*1019
Contrast	1100:01:00	1100:01:00	4000:01:00	1200:01:00	4000:01:00	1300:1
Brightness	500nit	500nit	500nit	500nit	500nit	500nit
View Angle	89/89/89/89	89/89/89/89	89/89/89/89	89/89/89/89	89/89/89/89	89/89/89/89
Power Supply	DC9-36V	DC9-36y	DC9-36V	DC9-36V	DC9-36V	DC9-36V
Operarion System	Android Windows	Android Windows	Android Windows	Android Windows	Android Windows	Android Windows
Application Environment	Bus	Bus	Bus	Bus	Bus	Bus
Max consumption	30W	30W	68W	70W	78W	125W

户外屏系列

OUTDOOR DISPLAY SERIES

售货机液晶屏

VENDING MACHINE LCD SCREEN

特征

FEATURES

1. 播放图片、视频、文字等多媒体广告信息
2. 全屏或分屏播放
3. 定时或遥控开关、遥控释放（可选）
4. 人物动态抓拍识别摄像头，事实背景掌握就绪情况
5. 可配备全网通4G模块，WIFI支持，7X24小时全天候运行

1. Play pictures, videos, text and other multimedia advertising information
2. Full-screen or split-screen playback
3. Timing or remote switch, remote release (optional)
4. Character dynamic capture recognition camera, the fact background grasp the ready situation
5. Can be equipped with full Netcom 4G module, WIFI support, 7X24 hours a day operatio



Part Number	TS-195THD	TS-215THD	TS-320THD	TS-430THD	TS-550THD	TS-650THD
Size	19.5 inch	21.5 inch	32 inch	43 inch	55 inch	65 inch
AA	477*135mm	476.064*267.786mm	698.4*392.85mm	940.89* 529.25mm	1428.48*803.52mm	1209.6*680.4mm
Resolution	1920*545	1920*1080	1920*1080	1920*1080	1920*1080	3840*2160
Contrast Ratio	3000:01:00	3000:01:00	1000:01:00	1200:01:00	1000:01:00	1200:01:00
Luminance	1000-2000nits	1000-2000nits	1000-2000nits	1000-2000nits	1000-2000nits	1000-2000nits
Viewing Angle	89/89/89/89	89/89/89/89	89/89/89/89	89/89/89/89	89/89/89/89	89/89/89/89
Power Supply	AC110-220V	AC110-220V	AC110-220V	AC110-220V	AC110-220V	AC110-220V
OS	Android /Windows/Linux (Debian, Ubuntu)					
Operating Environment	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor
Max Consumption	≤40W	≤80W	≤160W	≤240W	≤300W	≤400W

应用场景 APPLICATION SCENARIOS

可用于自动果汁机、自动售货机、超市、便利店、连锁店等
触摸自动售货机操作系统终端屏幕

Can be used in automatic juice machines, vending machines, supermarkets, convenience stores, chain stores, etc Touch the operating system terminal screen of the vending machine



智慧交通-阳光屏解决方案

SMART TRANSPORTATION



阳光下可读

纸质显示屏利用

环境光适合户外应用

Readable Under Sunlight

Paper display utilize ambient light that is suitable for outdoor application



多种颜色

更多色号：2、4、8、64、256、
65K、16.7M



Variety Color

More color number : 2、4、8、64、256、
65K、16.7M



纸状

像在纸上一样绘画和书写

Paper like

Draw and write like onpaper



超低功耗特性

低功耗扫描降低了Panel的功耗

Ultra Low Power Feature

Low Power Scan reduced the power consumption of Panel

BUS INFORMATION SYSTEM

Moon Station

T3 City Circle

Via Town Hall

Central

Town Hall

Wynyard

Chippendale

St James

Museum

Platform 7

All Destinations

Departures

1 min

宽温范围

宽温度范围内的可靠性
范围(-30°C~85°C)、UV
电阻 (玻璃液晶底座)

Wide Temp Range

Wide temperature reliability
Range (-30°C~85°C)、UV
Resistance (Glass LCD base)

眼睛护理

移除背光 (蓝光) 以
减少对眼睛的危害

Eyes Care

Remove backlight (Blue Light)
to reduce eye hazard

快速响应时间 / 刷新率

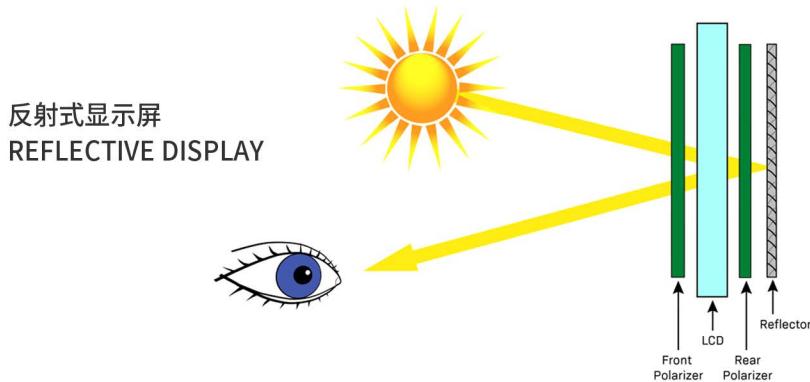
快速响应时间可以支持
动态信息

Fast Response Time / Refresh Rate

Fast response time can support
dynamic information

反射式 LCD 的工作原理是使用反射层和偏振滤光片，将光线反射回用户的眼睛，而不是从背光源发出光线。液晶层调节反射回来的光量，从而创建所需的图像。

Reflective LCD work by using a reflective layer along with the polarizing filter, to reflect the light back to the user's eyes instead of emitting light from a backlight. The liquid crystal layer modulates the amount of light that is reflected back, creating the desired image.

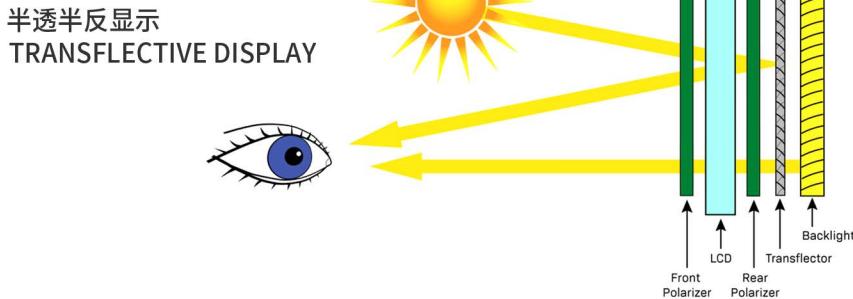


反射式 LCD 非常适合设备暴露在阳光直射下的户外或阳光下可读的应用。使用反射式 LCD 的最常见设备是户外应用（例如 GPS 设备）和便携式设备（例如电子阅读器、相机取景器和数字手表）。

Reflective LCD are great for outdoor or sunlight-readable applications where the device is exposed to direct sunlight. The most common devices using reflective LCDs are outdoor applications such as GPS devices and portable devices such as e-readers, camera viewfinders, and digital watches.

在透反式 LCD 中，背光用于在弱光条件下（例如室内或夜间）照亮屏幕。在明亮的光线条件下，例如户外或阳光直射，可以通过 LCD 表面反射环境光来观看屏幕。

In a transflective LCD, a backlight is used to illuminate the screen in low-light conditions, such as indoors or at night. In bright light conditions, such as outdoors or direct sunlight, the screen can be viewed by reflecting ambient light off the surface of the LCD.



透反式 LCD 通常用于工业和医疗设备，在任何照明条件下都必须具有高可视性。它们还广泛用于海洋、军事和航空应用，操作员需要在明亮和弱光条件下查看显示屏。

Transflective LCD are commonly used in industrial and medical equipment, where it's essential to have high visibility in any lighting conditions. They are also widely used in marine, military, and aviation applications where the operator needs to see the display in bright and low light conditions.

户外屏系列-阳光屏

OUTDOOR DISPLAY SERIES



全彩显示屏、显示屏色差无色差

Full color display, display Chromatism without chromatic aberration

高分辨率，视频内容更清晰

High resolution, clearer video content

强光下，显示内容依然清晰可见

Under strong light, the content of the display is still clearly visible

可靠性强 施工难度大大降低

Strong reliability construction difficulty greatly reduced

响应速度快、效率高

Fast response speed and high efficiency

质地更轻更扎实当前的流媒体、广告活动

The texture is lighter and more solid Current streaming media, advertising campaign

技术特点

S-LCD通过环境光显示FHD视频、图片和文字，并且产品不再使用自带的LED背光源，使其在强烈阳光下也能清晰可见，光线越强，显示越清晰，同时，远远低于配套的户外高亮液晶屏功耗，是普通户外高亮液晶屏功耗的1/20。是一种超节能的绿色环保产品。

无需背光，仅依靠外界环境光进行显示，不会有背光造成的蓝光，也可应用于室内护眼显示器和护眼平板电脑显示屏幕，是真正有意义的。关于护眼液晶显示屏。

阳光屏显示终端通过专业的户外IP65密封等级结构设计、专门的隔热防护和阳光下使用的防紫外线设计，保证了产品的可靠运行。配备军工级三防级别ANDROID系统主板及各类应用软件，为户外细分行业提供一整套解决方案。

TECHNICAL FEATURES

S-LCD displays FHD video, pictures and text through ambient light, and the product no longer uses its own LED backlight, so that it can be visible in strong sunlight, the stronger the light, the clearer the display, and at the same time, it is far lower than the power consumption of the matching outdoor bright LCD screen, and the power consumption of ordinary bright outdoor LCD screen is 1/20. It is a super energy-saving green environmental protection product.

No backlight, just rely on external ambient light to display, there will be no blue light caused by the backlight, can also be applied to indoor eye monitor and eye tablet computer display screen, is a real significance. On the eye protection LCD display.

The sun screen display terminal ensures the reliable operation of products through a professional outdoor IP65 seal grade structure design, specialized heat insulation protection and UV protection design for use in sunny conditions. It is equipped with a military-grade three defense level Android system motherboard and various application software, providing a comprehensive set of solutions for outdoor subdivision industries.

智慧小区 - 智能灯杆液晶屏

SMART COMMUNITY-SMART LAMP POLE LCD SCREEN

设计要求及注意事项：

此设计专门针对户外使用，对液晶屏的散热、通风、防水、防尘要求很高。以往的设计中，立柱顶部没有安装换气扇，导致立柱空间内部温度过高，散热不充分。塔的上部就像一个倒置的容器，加剧了温度室效应，导致内部温度超过80-90摄氏度。因此，液晶屏所能承受的最高温度被限制在65摄氏度。这会导致LCD屏幕黑屏或显示异常，并妨碍其正常工作。精心设计的解决方案对于确保液晶显示器的可靠运行起着至关重要的作用。

Design requirements and precautions:

This design is specifically intended for outdoor use, requiring high standards of heat dissipation, ventilation, waterproofing, and dustproofing for the LCD screen. In the previous design, a ventilation fan was not installed at the top of the column, resulting in excessively high temperatures inside the column space with inadequate heat dissipation. The upper part of the column acts like an inverted container, exacerbating temperature chamber effects and causing internal temperatures to exceed 80-90 degrees Celsius. Consequently, the maximum temperature that can be sustained by the LCD screen is limited to 65 degrees Celsius. This leads to blackouts or abnormal display on the LCD screen and prevents it from functioning properly. A well-designed solution plays a crucial role in ensuring reliable operation of liquid crystal displays.

改进建议：

- (1) 在每根灯柱顶孔两侧安装防水换气扇。
- (2) 外加窗式导雨格栅。
- (3) 每个灯柱内装有温度控制器，实时监控内部温度。
- (4) 将风扇启动阈值设置在30摄氏度以上，以有效散热。
- (5) 每个灯柱下方的散热孔均配备防尘过滤系统，并与地面保持足够的距离。
- (6) 在环境温度较高的区域，可考虑在每个灯杆下方安装具有热交换功能的空调机组。
- (7) 由于灯杆布置在室外，请确保灯杆内部安装防雷措施，预防雷雨天气时可能造成的设备损坏。

Improvement suggestions:

- 1) Install waterproof ventilation fans on both sides of the top hole of each lamp post.
- 2) Attach window-type rain guide grilles externally.
- 3) Incorporate a temperature controller within each lamp post to monitor real-time internal temperatures.
- 4) Set fan activation threshold above 30 degrees Celsius for effective heat dissipation.
- 5) Equip dust filtration systems for heat dissipation holes located beneath each lamp post while maintaining sufficient distance from ground level.
- 6) In areas with high ambient temperatures, consider installing air conditioning units with heat exchange capabilities below each lamp post.
- 7) Due to outdoor placement of light poles, ensure installation of lightning protection measures within their interiors as precautionary measures against potential equipment damage during thunderstorms.





Part Number	TS-15.6PHD	TS-215PHD	TS-238PHD	TS-280PHD	TS-320PHD	TS-430PHD
Size	15.6 inch	21.5 inch	23.8 inch	28 inch	32 inch	43 inch
Active Area	344.16*193.59mm	476.64 *268.11mm	527.04*296.46mm	620.93*341.28mm	708.48 *398.52mm	951.84 *535.41mm
Resolution	1920*1080	1920*1080	1920*1080	3840*2160	1920*1080	1920*1080
Contrast Ratio	8:01	8:01	36:01:00	15:01	25:01:00	40:01:00
Viewing Angle	60/60/60/60	60/60/50/50	60/60/55/55	60/60/60/60	50/50/60/60	60/80/50/60
OS	Android /Windows/Linux (Debian、Ubuntu)					
Display Type	Transflective	Transflective	Reflective	Reflective	Reflective	Reflective
Light Type	Backlight	Backlight	Front light	Front light	Front light	Front light
Interface	EDP	LVDS	LVDS	EDP	LVDS	LVDS
IP Rating	IP65	IP65	IP65	IP65	IP65	IP65
Operating Environment	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor
Max Consumption	≤40W	≤50W	≤60W	≤80W	≤80W	≤80W

阳光屏 (S-LCD) 的市场前景

THE MARKET PROSPECT OF REFLECTIVE DISPLAY

阳光屏具有强光下清晰显示FHD视频、图片和文字的特点，加上超节能无蓝光的优势。可广泛应用于众多户外多媒体显示场景和护眼显示产品，比较典型的应用有：

The Reflective display has the characteristics of clearly displaying FHD video, pictures and text under strong light, plus the advantage of super energy saving without blue light. Can be widely used in many outdoor multimedia display scenes and eye care display products, more typical applications are:

阳光屏 (S-LCD) 可供应尺寸：

REFLECTIVE DISPLAY AVAILABLE SIZES:

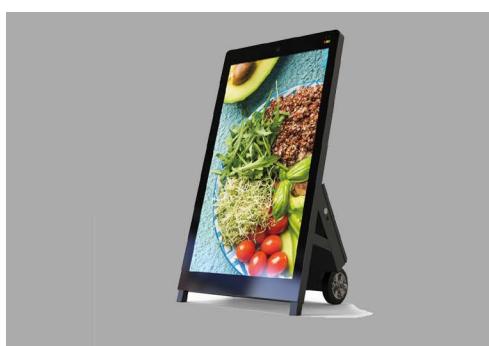
7.8inch, 10.1inch, 15.6inch, 21.5inch, 23.8inch, 28inch, 32inch, 43inch, 55inch.



电子公交站牌
ELECTRONIC BUS STOP SIGN



户外电子阅报栏
OUTDOOR ELECTRONIC NEWSPAPER COLUMN



户外移动数字标牌
OUTDOOR MOBILE DIGITAL SIGNAGE



景区导示牌
SCENIC AREA GUIDE SIGNS



户外灯杆显示屏
OUTDOOR LIGHT POLE DISPLAY



户外充电桩
OUTDOOR CHARGING PILE

工业自动化应用案例

INDUSTRIAL AUTOMATION APPLICATION CASES

1 数控机床设备应用

CNC machine tool equipment application

1. 高集成度，防水防尘稳定性高
High integration, high stability of water and dust
2. 整机低功耗，强力散热设计减低热感，良好散热设计增加机器寿命。
The whole machine has low power consumption, strong heat dissipation design reduces heat sensation, and good heat dissipation design increases machine life
3. 节减设备空间，提升设备整体性，丰富接口模式
Save device space, improve device integrity, and enrich interface modes
4. 完善操作便利性，增加操作人员体验
Improve the convenience of operation and increase the operator experience
5. 电容触摸替代机械键盘，更易操作
Capacitive touch replaces mechanical keyboard for easier operation



2 工业4.0应用

Industry 4.0 applications

泰信智能提供的工业平板电脑在工业自动化设备中广泛应用。工业生产过程中广泛采用自动控制、自动调整装置，用以代替人工操纵机器和机器体系进行加工生产的趋势，使工业自动化提高了工作量，使工作更加精确和准确，也提高产品的质量和耐用性。

The industrial tablet computers provided by Techtion Smart are widely used in industrial automation equipment. Automatic control and automatic adjustment devices are widely used in industrial production processes to replace manual operation of machines and machine systems for processing and production. Industrial automation has increased the workload. Make work more precise and accurate, and also improve the quality and durability of products.



3 工厂产线智能化应用

Intelligent application of factory production line

- 1、在复杂多变的环境下作业，适应宽温、宽压、抗干扰，防尘、防水耐腐蚀等。
Operating in complex and changeable environment, adapt to wide temperature, wide pressure, anti-interference, dustproof, waterproof and corrosion resistance.
- 2、具有抗震、防电磁干扰能力。It has anti-seismic and anti-electromagnetic interference capability.
- 3、符合产线工作需要，性能稳定，能7X24小时不间断工作。
In line with the production line work needs, stable performance, 7X24 hours uninterrupted work.
- 4、高分辨率、大尺寸屏幕，数据变化呈现可以一目了然。
High resolution, large size screen, data changes can be presented at a glance
- 5、处理器强大，能够实时分析，并能迅速形成报告。
The processor is powerful, capable of real-time analysis, and can quickly form reports.
- 6、配备多种不同接口，可外连其他设备。
Equipped with a variety of different interfaces, can be connected to other devices.



智慧城市案例

SMART CITY CASE

1 智能垃圾分类站应用

Intelligent garbage sorting station application

泰信智能的嵌入式工业显示器可适应全天候户外运行，支持在-10°C~60°C高温严寒等环境中持续作业，并通过防水防尘、抗振、抗干扰等可靠性检验。这种安全性能优势使得泰信智能设备不止在垃圾分类领域应用广泛，更拓展到智慧城市建设的方方面面，服务于更加多样化的复杂场景之中。

Techtion Smart's embedded industrial displays can adapt to all-weather outdoor operation and support it continues to operate in environments with temperatures ranging from -10°C to 60°C, and has passed reliability tests such as waterproofing, dustproofing, anti-vibration, and anti-interference. This safety performance advantage makes Techtion Smart equipment not only widely used in the field of garbage classification, but also expanded to all aspects of smart city construction, serving more diverse and complex scenarios.



2 叉车式AGV上应用

Application on forklift AGV

AGV全称自动导引运输车(Automated Guided Vehicle)，根据功能和结构不同具备多种应用形态，叉车式AGV便是其中一种拥有自主导航、自动移载和任务调度等功能的运输机器人。置身错综复杂的仓储物流系统网络，泰信智能的工业平板电脑承载着叉车式AGV在导航、定位、路径规划、任务调度、监控等核心功能上的交互与控制作用。通过直观的界面，操作员可实时查看AGV的状态、任务进度和异常情况，并进行必要的调整和干预，以维持AGV系统高效运行。

The full name of AGV is Automated Guided Vehicle. It has various application forms according to different functions and structures. Forklift AGV is one of the transport robots with functions such as autonomous navigation, automatic transfer and task scheduling. In the intricate warehousing and logistics system network, Techtion Smart's industrial tablets carry the interaction and control functions of forklift-type AGVs in core functions such as navigation, positioning, path planning, task scheduling, and monitoring. Through the intuitive interface, operators can view the status, task progress and abnormal conditions of the AGV in real time, and make necessary adjustments and interventions to maintain efficient operation of the AGV system.



3 政务便民自助终端应用

Government affairs convenience self-service terminal application

泰信智能工业一体机系列采用高规格工控液晶屏，支持HDMI高清显示，可提供流程文字/图片/视频等终端政务资讯的传递显示。支持灵活选配尺寸、分辨率、亮度等参数，显示器采用螺纹DC接口和RJ45触摸接口双重防脱落设计，有效避免接触不良等应用故障。

针对政务服务的特殊安全性需求，泰信智能工业一体机支持定制防窥屏，保障用户的个人隐私和信息安全。

Techtion Smart industrial all-in-one machine series uses high-standard industrial control LCD screens, supports HDMI high-definition display, and can provide process text/pictures/videos and other terminal government information transmission and display. It supports flexible selection of parameters such as size, resolution, brightness, etc. The monitor adopts a threaded DC interface and RJ45 touch interface dual anti-falling design to effectively avoid application failures such as poor contact.

In response to the special security needs of government services, Techtion Smart industrial all-in-one machines support customized privacy screens to protect users' personal privacy and information security.



智慧医疗行业应用案例

SMART MEDICAL INDUSTRY APPLICATION CASES

1 导诊机器人应用

Application of guided robot

泰信智能一体机的高集成度可实现多种模块的灵活增减配，通过与人工智能技术的深度结合，打造功能各异的个性化商业服务机器人，为终端应用拓展想象空间。泰信智能一体机的工业级品质能有效保证机器人在恶劣环境下的正常运作，确保7*24H不间断稳定运行，有效替代人工，可大大节约时间成本和人力成本。

The high integration level of Techtion Smart all-in-one machine can realize the flexible addition and deletion of various modules. Through in-depth integration with artificial intelligence technology, it can create personalized commercial service robots with different functions, expanding the imagination space for terminal applications. The industrial-grade quality of the Techtion Smart all-in-one machine can effectively ensure the normal operation of the robot in harsh environments, ensure 7*24H uninterrupted and stable operation, effectively replace labor, and greatly save time and labor costs.



2 医疗推车中上应用

Medical cart in the application

泰信智能考虑到智能医疗推车的多个应用场景，以及在医院这一特殊环境下长时间工作，这要求中控终端能够满足多种需求。EMC/EMI级别干扰、抗干扰标准，既不能干扰别的设备工作，别的设备也无法干扰它，在医院强磁的环境下能够运行如常。泰信智能工业平板电脑采用全封闭无风扇静音设计，营造无噪音病房。无缝隙纯平面板设计，IP65防尘防水级面板，有效防止灰尘和水滴进入机器内部。支持无线WIFI连接HIS医疗、临床教研等系统，满足智能医疗推车多项应用设计。集成HD Graphic显示核心，设有HDMI、VGA等接口，医学影像图片清晰显示。支持通电开机、远程唤醒、自动服务功能，可定制断电保护。

Techtion Smart takes into account the multiple application scenarios of smart medical carts and the long-term working in the special environment of the hospital, which requires the central control terminal to meet a variety of needs. EMC/EMI level interference and anti-interference standards can neither interfere with the work of other equipment, nor can other equipment interfere with it. It can operate normally in the strong magnetic environment of the hospital. Techtion Smart industrial tablet adopts a fully enclosed fanless silent design to create a noise-free ward. Seamless pure flat panel design, IP65 dustproof and waterproof panel, effectively prevents dust and water droplets from entering the inside of the machine. Supports wireless WIFI connection to HIS medical, clinical teaching and research and other systems to meet multiple application designs of smart medical carts. Integrated HD Graphic display core, equipped with HDMI, VGA and other interfaces, medical imaging pictures can be



3 健康体检机上的应用

Application of health examination machine

泰信智能提供10.1"-23.8"多尺寸选择，支持10点电容触控，可定制高亮、全视角、高分辨率等增强屏幕性能，支持高清视频、图像等可视化引导自检，为用户提供灵活多角度的简易识读效果和流畅触控反馈。

Techtion Smart provides multiple size options from 10.1" to 23.8", supports 10-point capacitive touch, can customize enhanced screen performance such as highlight, full viewing angle, and high resolution, and supports visual guided self-inspection such as high-definition video and images, providing users with flexible easy reading effects from multiple angles and smooth touch feedback.



特殊环境应用案例

SPECIAL INDUSTRY APPLICATION CASES

1 船舶、航海

Ships, Sailing

泰信智能不锈钢工业显示屏不仅坚固抗震、抗压力、持久耐用、高强度防尘防水、耐腐蚀磨损、防油污等优良特性。它们以其独特的优势，为航海领域提供了清晰、准确的视觉信息，成为船舶的明亮“眼睛”。它通过实时显示航行信息和监控画面，船员可以及时了解船舶的航行状态和周围环境，有效避免碰撞、搁浅等安全事故。它可以将各种设备的状态信息实时传输至船舶控制室，方便人员进行远程监控和管理，从而提高船舶的运行效率和安全性。

The stainless steel industrial display screens produced by Taixin Intelligent are not only strong and earthquake-resistant, pressure-resistant, durable, high-strength, dust-proof and waterproof, corrosion-resistant, wear-resistant, and oil-proof. With their unique advantages, they provide clear and accurate visual information for the navigation field and become the bright "eyes" of the ship. By displaying navigation information and monitoring images in real time, the crew can timely understand the navigation status and surrounding environment of the ship, and effectively avoid safety accidents such as collisions and groundings. It can transmit the status information of various equipment to the ship control room in real time, which is convenient for personnel to conduct remote monitoring and management, thereby improving the operation efficiency and safety of the ship.



2 食品加工行业

Food processing industry

在现代化的食品加工厂中，电子显示屏已成为不可或缺的设备之一，泰信智能生产的不锈钢工业显示屏不仅坚固抗震、抗压力、持久耐用、高强度防尘防水、防油污等优良特性，更具备在恶劣的肉类屠宰加工行业、食品行业等环境下使用。泰信工业显示屏利用数据可视化技术将食品加工厂的生产数据、产品品质检测数据、食品卫生状况等信息以图形、表格等形式展示出来的系统。通过数据大屏不仅可以提高生产效率，还可以优化管理流程，确保食品的安全和质量。

In modern food processing plants, display screens have become one of the indispensable equipment. The stainless steel industrial display screens produced by Techtion Smart are not only strong and earthquake-resistant, pressure-resistant, durable, highly dustproof, waterproof, and oil-proof, but also can be used in harsh environments such as the meat slaughtering and processing industry and the food industry. Techtion's Industrial Monitor uses data visualization technology to display the production data, product quality inspection data, food hygiene status and other information of food processing plants in the form of graphics, tables, etc. The large screen can not only improve production efficiency, but also optimize management processes to ensure food safety and quality.



3 实验室、制药行业

Laboratory、pharmaceutical industry

实时监控环境参数：显示屏可以实时显示温湿度、露点等环境参数，确保生产环境符合药品生产的要求。通过在线实时24小时连续采集和记录监测点位的温度、湿度各项参数情况，显示屏以数字、图形和图像等多种方式展示这些数据，确保生产环境的稳定。

人数统计与管理：人数统计显示屏采用人脸识别技术，自动捕捉员工的面部图像并实时匹配数据库，准确统计药厂员工的进出情况。这不仅可以提高透明度，还能帮助管理者合理安排班次，提高生产效率，并在紧急情况下提供快速的员工搜索和定位服务。

展示生产数据和生产指令：显示屏可以实时显示生产线上各个工序的生产数据，帮助生产管理人员及时了解生产情况，发现问题并采取措施。同时，通过展示工艺流程和工作指令，提高工人工作效率和产品质量。

Real-time monitoring of environmental parameters: The display screen can display environmental parameters such as temperature, humidity, and dew point in real time to ensure that the production environment meets the requirements of drug production. By continuously collecting and recording the temperature and humidity parameters of the monitoring points online for 24 hours, the display screen displays these data in various ways such as numbers, graphics, and images to ensure the stability of the production environment.

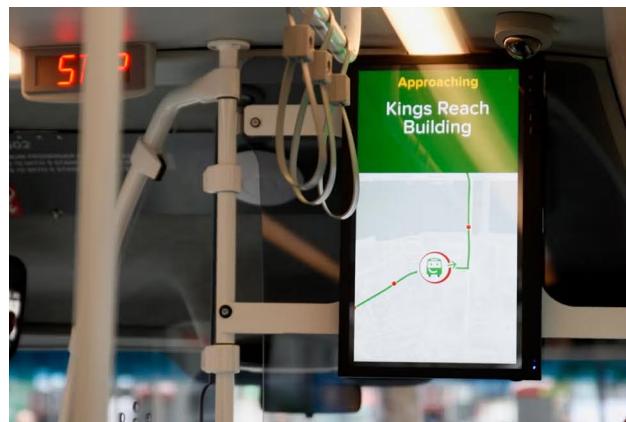
Headcount and management: The headcount display screen uses face recognition technology to automatically capture employees' facial images and match the database in real time to accurately count the entry and exit of pharmaceutical factory employees. This not only improves transparency, but also helps managers arrange shifts reasonably, improve production efficiency, and provide fast employee search and positioning services in emergency situations.

Display production data and production instructions: The display screen can display production data of each process on the production line in real time, to help production managers understand the production situation in a timely manner, find problems and take measures. At the same time, by displaying process flow and work instructions, workers' work efficiency and product quality can be improved.



公交地铁车载屏应用案例

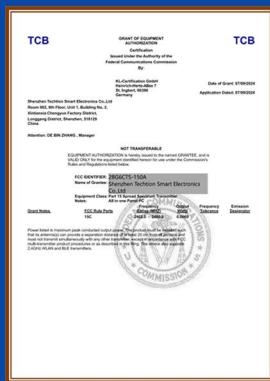
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