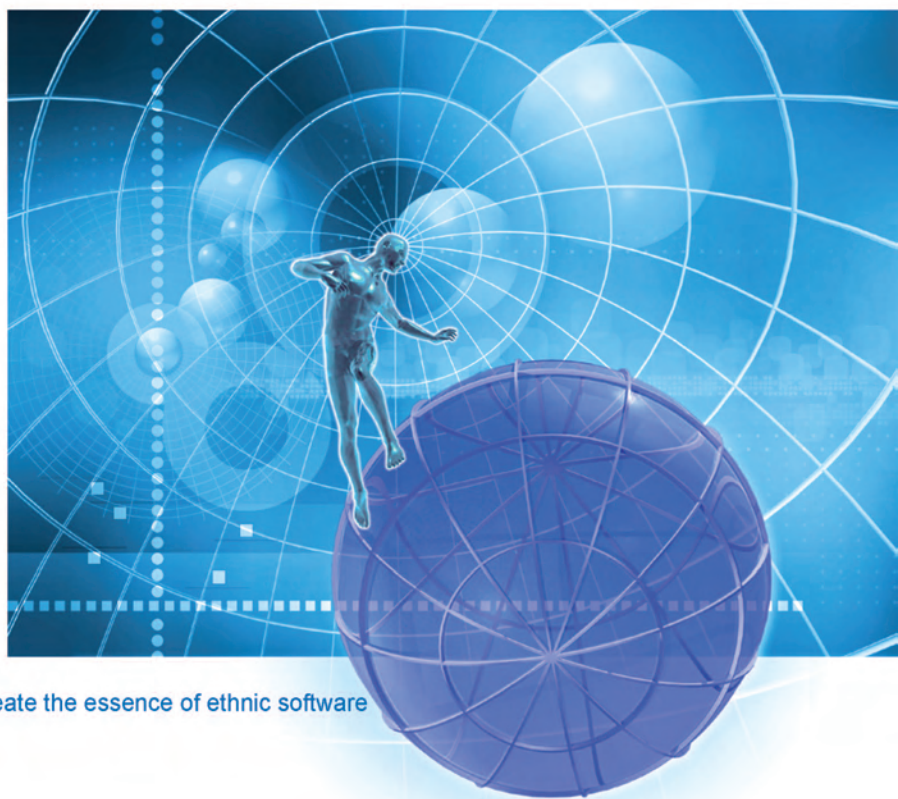


MCGS

Embedded configuration software

mcsTpc

Embedded integrated touch screen



Be the national industrial pioneer

Create the essence of ethnic software

Be the national industrial pioneer

Create the essence of ethnic software

Beijing Kunlun Tongtai Automation Software Technology Co. Ltd is a high-tech enterprise group. The company is engaged in professional automation software and hardware development, design and application system integration, as well as providing general designs for hardware and software programs. Kunlun Tongtai consists of the headquarter based in Beijing, the customer service center located in Jinan, the Chengdu manufacture center, the Shanghai office, the Shenzhen Office, the Xi'an Office, the Nanjing office, the Wuxi office, etc. This company also has a professional technical staff and senior management staff of nearly 200 employees. 98% of the employees possess Bachelor degree or above. It is a young, knowledgeable and highly qualified professional staff.

Using "Be the national industrial pioneer and create the essence of ethnic software" as their goal, the company has been developing and moving forward actively; introducing excellent industrial control configuration software and hardware products continuously since its inception. Kunlun Tongtai has launched configuration software with different features such as MCGS generic, MCGS Online, MCGS embedded etc. So far, the products cover environmental, petroleum, aerospace, pharmaceuticals, coal, water, electricity, chemicals, metallurgy, mining, transportation, machinery, food and many other industries. In August of 2002, the company launched mcgsTpc embedded HMI (Human Machine Interface) series, which offer a broad range of touch screen including 7 inch, 10.4 inch, 12.1-inch and 15-inch, which provides users with flexible solution.

Kunlun Tongtai company history:

1995: The company took lead in the configuration software industry by launching MCGS generic and MCGS online software. With years of efforts, the company has become the leading vendor of configuration software in China. Kunlun Tongtai is now stepping into the international configuration software market.

2001: The company established embedded development strategy, became the first company to launch embedded configuration software in China, as well as became the leader in the embedded software field.

2002: The company entered the field of hardware, by launching the embedded technology-based mcgsTpc HMI series. This created a business development path from software to hardware and formed an integrated software and hardware advantage.

2004: The company introduced their CPU motherboard with proprietary intellectual property rights based on the ARM 2410 CPU technology. They became one of the few high-tech enterprises in the industrial automation field that owns motherboard development technology.

2006: The company's mcgsTpc product is upgraded into a new generation of human-machine interface products with an ARM2440 core, clocked at 400MHz, which became the leading domestic and international human-machine interface product at one stroke.

2009: The company launched new mcgsTpc embedded integrative touch screen. With their memory upgrade to 128M, their sturdy and compact product design, their safe and simple ease of operation by touch, and their stylish appearance the new generation of mcgsTpc products will create new industry standards, leading the man-machine interface into a new era.

Till then, the company completed all the core human-machine interface technologies, including configuration software, operating system technology, motherboard technology and other related technologies. Kunlun Tongtai became one of the strongest domestic companies with comprehensive advantages in software and hardware technology. Meanwhile the mcgsTpc Kunlun Tongtai products also became one of the most competitive domestic and international human-machine interface products because of the world-class performance advantage, China's leading price advantage and Chinese domestic service advantages.



mcgsTpc Introduction

Kunlun Tongtai dedicated more than 5 Billion Yuan and 8 years of time into mcgsTpc, a new generation of embedded integrated human-machine interface product. Upon its birth, its advanced concept, excellent performance and modern design eclipsed similar products immediately mcgsTpc attracted the attention of customers, and will take the great challenge of becoming the world's leading International HMI brand.

Advantages of the mcgsTpc

Innovative Technology

The mcgsTpc applies the most advanced embedded technology, combines the latest embedded operating systems with energy efficient CPU chips. It's written in the most advanced programming language EVC.

Powerful Animation Feature

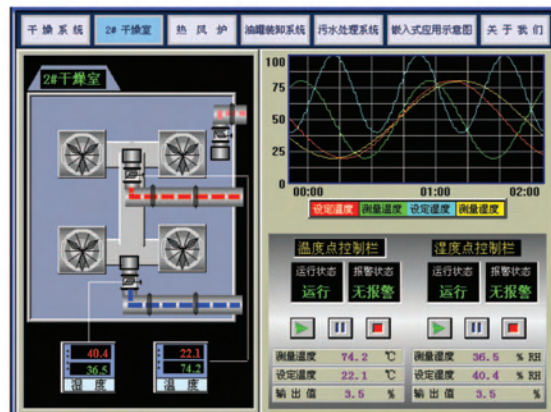
The mcgsTpc use MCGS embedded configuration software, thousands of device drivers, thousands of animations database and rich 3D features. It is as simple as using 3D Max.

Large Storage Capacity

The mcgsTpc can store up to 10,000 messages or alarm information with a memory space of 128M at any time, provides more effective decision-making to managers USB export is supported. RS232/RS485, industrial Ethernet.

Multi Communication Ports

The mcgsTpc has a variety of ports, up to 5 individual serial ports and standard Ethernet port. MODBUS_TCP and other means of communication are available.



Visual Effects

The mcgsTpc use high brightness display: TFT true color (65535 colors) and internationally known LCD screen. It has a cool visual effect, which greatly enhances the standing and image of products in consumers' eyes.

High Reliability

As a result of the embedded technology and low power consumption technology, combined with quality design, mass production and scientific tests, mcgsTpc has ultra-high reliability so consumers can use it without worries. It has now been widely used in a variety of mechanical equipment, engineering projects and process automation.

Low Power Consumption

The mcgsTpc uses an energy efficient CPU chip. With power in milliwatt scale, it is the most dependable CPU.

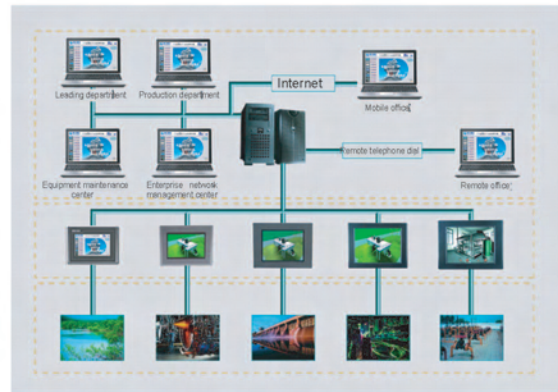
High Operation Speed

The mcgsTpc is equipped with 400MHz low-power CPU chips, it's 2 to 4 times faster than similar products.



MCGS Introduction

Until now, Kunlun Tongtai has successfully launched three series of products, namely MCGS generic configuration software, MCGS Online configuration software and MCGS embedded configuration software. The three products are the same in style, but different in function. The perfect combinations of the three products form a complete software structure in the industrial monitoring system. It performs tasks from device acquisition, data processing and control at a workstation to the computer network management and Web browsing on an industrial site. It is the ideal choice of an enterprise to achieve management-control integration.



MCGS Integrated Management and Control Solutions

■ MCGS Embedded:

The Lowest layer in the control system is the MCGS embedded configuration software. The MCGS embedded configuration software is used to collect and monitor on-site data and also to process and control front-end data. Combined with other related hardware, MCGS embedded configuration software enables quick and easy development of a variety of field acquisition, data processing and equipment control, including smart meters that can be configured flexibly, data acquisition modules, paperless recorders, unmanned site acquisition stations, human-machine interfaces and other special equipment.

■ MCGS Generic:

In the middle layer of the control system is MCGS generic configuration software. MCGS generic configuration software is mainly used for routine monitoring services such as data collection and processing in generic workstations, real-time and historical data processing, alarm safety systems, control processing, animation display, the trend curve and the output report. The requirements for working software are: a reliable system, exactly what Kunlun Tongtai provides. This software is easily able to replace a large labor force, able to handle the alarm from an on-site automatic monitor, and able to print various reports regularly or at any time.

■ MCGS Online:

At the top of the monitoring system is the MCGS online configuration software. MCGS online configuration software majorly completes the information collection and dissemination of the whole system. That is, it relays data to a central server created by the MCGS network software where it is stored and managed and then sent to stations linked to it by web browser. This way, business leaders sitting in the office, the production department, the maintenance department and other departments can easily and intuitively see the status of the work site, the production plan completion status, the equipment status, and further information. Even the managers on a business trip thousands of miles away can monitor the company at any time. This makes remote managing a reality.



Technology Overview

mcgsTpc		K Range		H Range			
Model		TPC7062K	TPC1062K	TPC1063E	TPC1063H	TPC1262H	TPC1561H
Product characteristic	Classification						
	Dimensions (inch)	7	10.2	10.4		12.1	15
	LCD screen	TFT LCD,LED Back-lighting	TFT LCD,LED Back-lighting	TFT LCD		TFT LCD	
	Display color	True Color, 65535 colors	True Color, 65535 colors	True Color, 65535 colors		True Color, 65535 colors	
	Resolution	800x480	800x480	640x480		800x600	1024x768
	LCD brightness	200cd/m ²	200cd/m ²	350cd/m ²		350cd/m ²	300cd/m ²
	Touch screen	Resistive	Resistive	Resistive		Resistive	
	Power supply	24V DC	24V DC	24V DC		24V DC	
	Nominal power	5W	5.5W	14W		17W	20W
	CPU motherboard	ARM low power consumption,400MHz	ARM low power consumption,400MHz	ARM low power consumption,400MHz		ARM low power consumption,400MHz	
	Memory	64M SDRAM	64M SDRAM	64M SDRAM		64M SDRAM	
	Memory device	128M FLASH	128M FLASH	128M FLASH		128M FLASH	
	Configuration Software	MCGS Embedded configuration software(runtime version)	MCGS Embedded configuration software(runtime version)	MCGS Embedded configuration software(runtime version)		MCGS Embedded configuration software(runtime version)	
Environmental conditions	Operating temperature	0℃ ~ 50℃	0℃ ~ 50℃	0℃ ~ 50℃		0℃ ~ 50℃	
	Operating humidity	5% ~ 90%	5% ~ 90%	5% ~ 90%		5% ~ 90%	
	Storage temperature	-10℃ ~ 60℃	-10℃ ~ 60℃	-10℃ ~ 60℃		-10℃ ~ 60℃	
	Vibration frequency	10~57Hz 57~150Hz	10~57Hz 57~150Hz	10~57Hz 57~150Hz		10~57Hz 57~150Hz	
	Vibration acceleration	0.075mm 9.8m/s ²	0.075mm 9.8m/s ²	0.075mm 9.8m/s ²		0.075mm 9.8m/s ²	
	Vibration scan rate	Oct/min≤1	Oct/min≤1	Oct/min≤1		Oct/min≤1	
Product Specifications	Structure	Industrial plastic structure	Industrial plastic structure	Industrial plastic structure		Aluminum alloy structure	
	Colour	Industrial grey	Industrial grey	Industrial grey		Dark gray	
	Panel size (mm)	226.5×163	274×193	315×239		323×246	420×310
	Cabinet portiforium (mm)	215×152	261×180	303×226		303×226	384×284
	Net weight (kg)	0.8	1.41	2.1	2.2	3.9	6.1
External Interface	Serial ports	1×RS232, 1×RS485	1×RS232, 1×RS485	1×RS232 1×RS232/485	2×RS232 2×RS232/485	2×RS232, 2×RS232/485	
	USB	1 master and 1 slave	1 master and 1 slave	2 master		2 master	
	Ethernet	RJ45 Ethernet interface	RJ45 Ethernet interface	RJ45 Ethernet interface		RJ45 Ethernet interface	
Certification	Certification	CE/FCC	CE/FCC	CE/FCC		CE/FCC	
	Protection degree	IP65 (Front panel)	IP65 (Front panel)	IP65 (Front panel)		IP65 (Front panel)	
	Interference immunity	Grade III Industrial	Grade III Industrial	Grade III Industrial		Grade III Industrial	

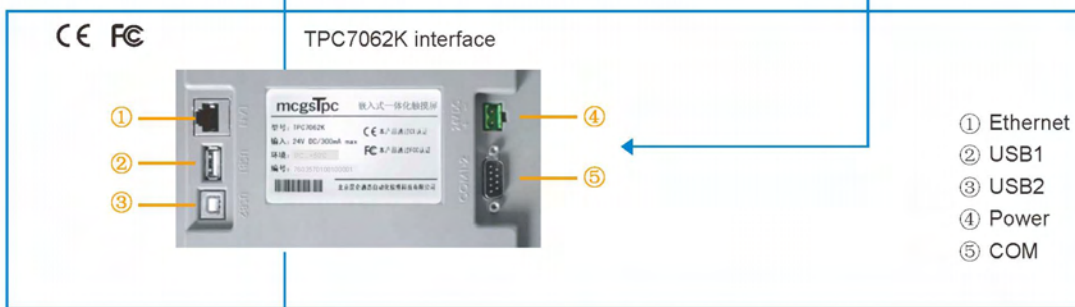


○ TPC7062K

TPC7062K facade



TPC7062K backface



■ Product introduction

TPC7062K is a high-performance embedded integrated touch screen, based on low-power consumption CPU (clock speed 400MHz). It is designed to adopt a 7-inch high-brightness TFT LCD screen (resolution 800 x 480) and four-wire resistive touch screen (resolution 1024 x 1024); meanwhile it is pre-installed with MCGS embedded configuration software (runtime version).

■ Product specification

Structure	Industrial plastic structure
Installation	Embedded
Power	DC24V/30W
Overall dimensions	226.5 x 163mm x 36mm
Front panel	226.5mm x 163mm x 6mm
Panel viewport	153.6mm x 86.64mm
Enclosure shape	213mm x 150mm x 30mm
Cabinet portiforium	215mm x 152mm
Net weight	0.8kg
Enclosure color	Industrial grey

■ Product character

LCD screen	7" TFT LCD screen, resolution (800 x 400), LED Back-lighting
CPU	Based on ARM structure embedded low-power consumption
motherboard	CPU, clock speed 400MHz
Touch screen	Four-wire resistive
Memory	64M SDARM
Memory device	128M FLASH
Interface	1 x RS232 1 x RS485 2 x USB (1 Master 1 slave) 1 x LAN

■ Application environment

Operating temperature	0°C~50°C	Vibration frequency	10~57Hz 57~150Hz
Operating humidity	5%~90%	Vibration acceleration	0.075mm 9.8m/s ²
Storage temperature	-10°C~60°C	Vibration scan rate	Oct/min ≤ 1

■ Product certifications

CE certification	EN55022 EN55024
FCC certification	PART15
EMC	TPC7062K compliance with grade III industrial standard
Protection degree	IP65 (Front panel)

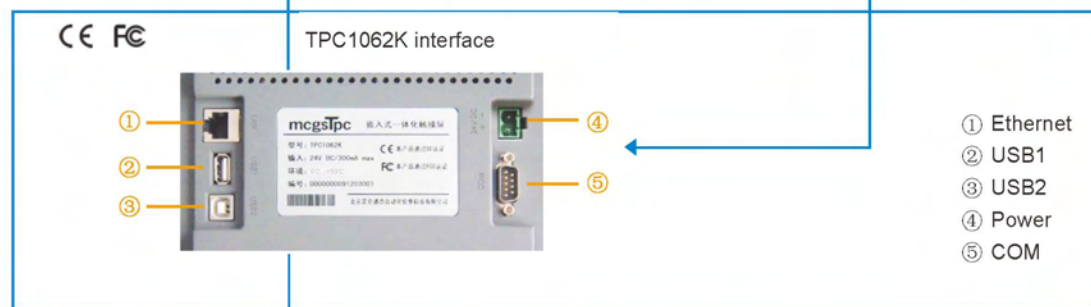
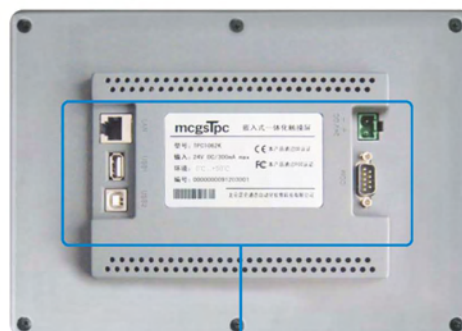


○ TPC1062K

TPC1062K facade



TPC1062K backface



■ Product introduction

TPC1062K is a high-performance embedded integrated touch screen, based on low-power consumption CPU (clock speed 400MHz). It is designed to adopt a 10.2-inch high-brightness TFT LCD screen (resolution 800 x 480) and four-wire resistive touch screen (resolution 1024 x 1024); meanwhile it is pre-installed with MCGS embedded configuration software (runtime version).

■ Product character

LCD screen	7" TFT LCD screen, resolution (800 x 400), LED Back-lighting
CPU	Based on ARM structure embedded low-power consumption
motherboard	CPU, clock speed 400MHz
Touch screen	Four-wire resistive
Memory	64M SDARM
Memory device	128M FLASH
Interface	1 RS232 1 x RS485 2 x USB (1 Master 1 slave) 1 x LAN

■ Product specification

Structure	Industrial plastic structure
Installation	Embedded
Power	DC24V/30W
Overall dimensions	274mm x 193mm x 40mm
Front panel	274mm x 193mm x 6mm
Panel viewport	220.8mm x 132.9mm
Enclosure shape	259mm x 178mm x 34mm
Cabinet portiforium	261mm x 180mm
Net weight	1.41kg
Enclosure color	Industrial grey

■ Application environment

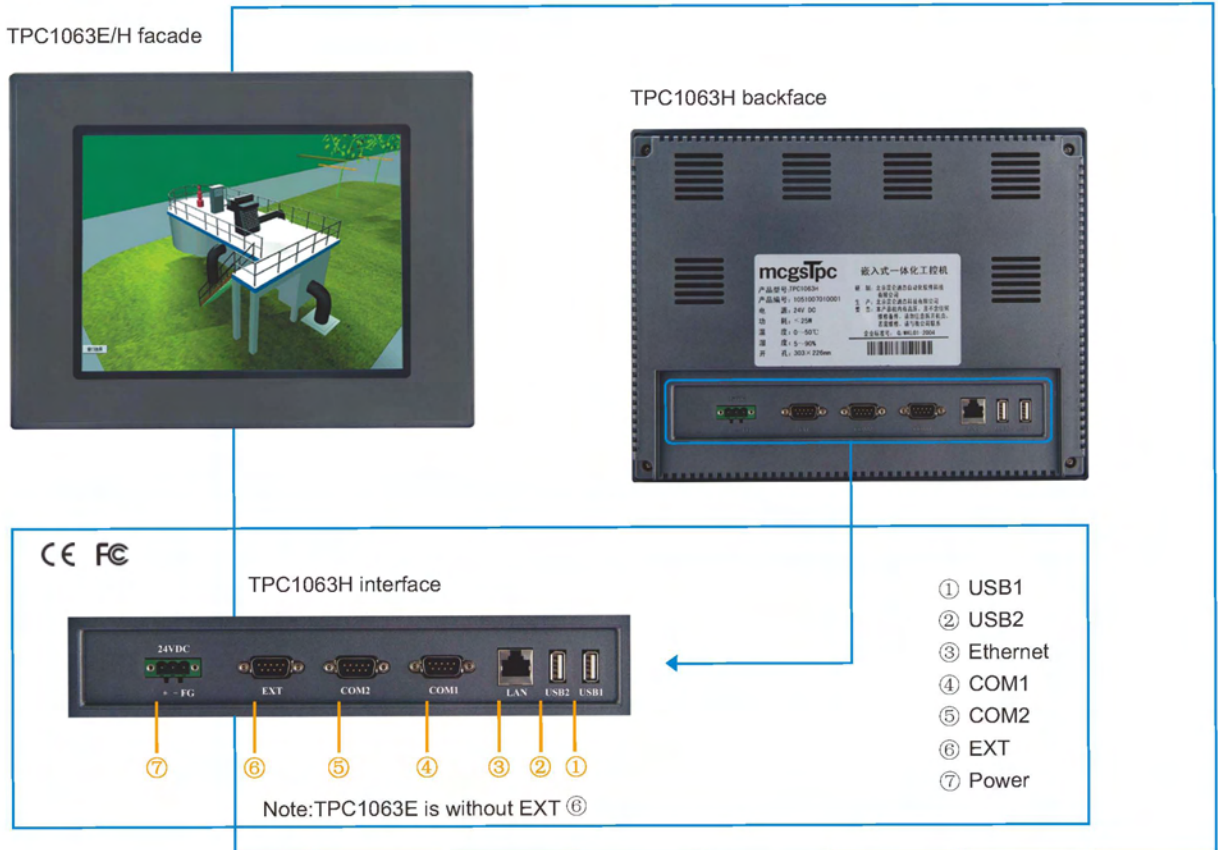
Operating temperature	0°C~50°C	Vibration frequency	10~57Hz 57~150Hz
Operating humidity	5%~90%	Vibration acceleration	0.075mm 9.8m/s ²
Storage temperature	-10°C~60°C	Vibration scan rate	Oct/min ≤ 1

■ Product certifications

CE certification	EN55022 EN55024
FCC certification	PART15
EMC	TPC1062K compliance with grade III industrial standard
Protection degree	IP65 (Front panel)



○ TPC1063E/H



■ Product introduction

TPC1063E/H is a high-performance embedded integrated IPC, based on low-power consumption CPU (clock speed 400). It is designed to adopt a 10.4-inch high-brightness TFT LCD screen (resolution 640 x 480) and four-wire resistive touch screen (resolution 1024 x 1024); meanwhile it is pre-installed with MCGS embedded configuration software (runtime version).

■ Product specification

Structure	Industrial plastic structure
Installation	Embedded
Power	DC24V/30W
Overall dimensions	315mm x 239mm x 56mm
Front panel	315mm x 239mm x 8mm
Panel viewport	213mm x 160mm
Enclosure shape	300mm x 223mm x 48mm
Cabinet portiforium	303mm x 226mm
Net weight	2.1kg/2.2kg(E/H)
Enclosure color	Industrial grey

■ Product character

LCD screen	10.4" TFT LCD screen, resolution(640 x 480)
CPU	Based on ARM structure embedded low-power consumption
motherboard	CPU, clock speed 400MHZ
Touch screen	Four-wire resistive
Memory	64M SDARM
Memory device	128M FLASH
Interface	2 x RS232 2 x RS232/RS485 2 x USB 1 x LAN

■ Application environment

Operating temperature	0℃~50℃	Vibration frequency	10~57Hz 57~150Hz
Operating humidity	5%~90%	Vibration acceleration	0.075mm 9.8m/s ²
Storage temperature	-10℃~60℃	Vibration scan rate	Oct/min≤1

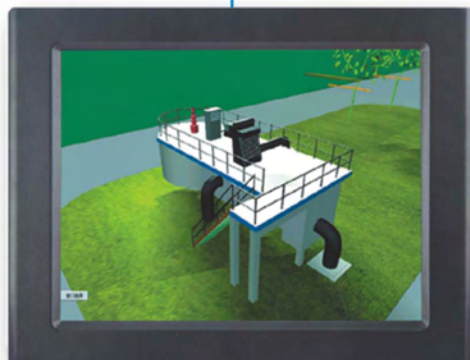
■ Product certifications

CE certification	EN55022 EN55024
FCC certification	PART15
EMC	Compliance with grade III industrial standard
Protection degree	IP65(Front panel)



○ TPC1262H

TPC1262H facade



TPC1262H backface



CE FC

TPC1262H interface



- ① USB1
- ② USB2
- ③ Ethernet
- ④ COM1
- ⑤ COM2
- ⑥ EXT
- ⑦ Power

■ Product introduction

TPC1262H is a high-performance embedded integrated IPC, based on low-power consumption CPU (clock speed 400MHZ). It is designed to adopt a 12.1-inch high-brightness TFT LCD screen (resolution 800 x 600) and four-wire resistive touch screen (resolution 1024 x 1024), also has well electromagnetic shielding and beautiful solid aluminum alloy structure; meanwhile it is pre-installed with MCGS embedded configuration software (runtime version).

■ Product specification

Structure	Aluminum alloy structure
Installation	Embedded
Power	DC24V/30W
Overall dimensions	323mm x 246mm x 65.6mm
Front panel	323mm x 246mm x 9.5mm
Panel viewport	249mm x 188mm
Enclosure shape	300mm x 223mm x 56mm
Cabinet portiforium	303mm x 226mm
Net weight	3.9kg
Enclosure color	Dark gray

■ Product character

LCD screen	12.1"TFT LCD screen,resolution(800 x 600)
CPU	Based on ARM structure embedded low-power consumption
motherboard	CPU,clock speed 400MHZ
Touch screen	Four-wire resistive
Memory	64M SDARM
Memory device	128M FLASH
Interface	2 x RS232 2 x RS232/RS485 2 x USB 1 x LAN

■ Application environment

Operating temperature	0℃~50℃	Vibration frequency	10~57Hz 57~150Hz
Operating humidity	5%~90%	Vibration acceleration	0.075mm 9.8m/s ²
Storage temperature	-10℃~60℃	Vibration scan rate	Oct/min≤1

■ Product certifications

CE certification	EN55022 EN55024
FCC certification	PART15
EMC	Compliance with grade III industrial standard
Protection degree	IP65(Front panel)



○ TPC1561H

TPC1561H facade

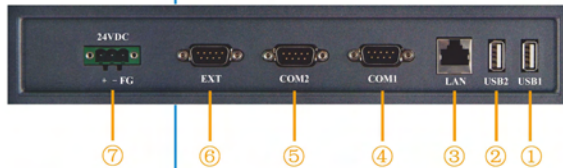


TPC1561H backface



CE FC

TPC1561H interface



- ① USB1
- ② USB2
- ③ Ethernet
- ④ COM1
- ⑤ COM2
- ⑥ EXT
- ⑦ Power

■ Product introduction

TPC1561H is a high-performance embedded integrated IPC, based on low-power consumption CPU (clock speed 400MHz). It is designed to adopt a 15-inch high-brightness TFT LCD screen (resolution 1024 x 768) and four-wire resistive touch screen (resolution 1024 x 1024), also has well electromagnetic shielding and beautiful solid aluminum alloy structure; meanwhile it is pre-installed with MCGS embedded configuration software (runtime version).

■ Product specification

Structure	Aluminum alloy structure
Installation	Embedded
Power	DC24V/30W
Overall dimensions	420mm x 310mm x 78mm
Front panel	420mm x 310mm x 11mm
Panel viewport	306mm x 230mm
Enclosure shape	381mm x 281mm x 67mm
Cabinet portiforium	384mm x 284mm
Net weight	6.1kg
Enclosure color	Dark gray

■ Product character

LCD screen	15" TFT LCD screen, resolution (1024 x 768)
CPU	Based on ARM structure embedded low-power consumption
motherboard	CPU, clock speed 400MHZ
Touch screen	Four-wire resistive
Memory	64M SDARM
Memory device	128M FLASH
Interface	2 x RS232 2 x RS232/RS485 2 x USB 1 x LAN

■ Application environment

Operating temperature	0°C~50°C	Vibration frequency	10~57Hz 57~150Hz
Operating humidity	5%~90%	Vibration acceleration	0.075mm 9.8m/s ²
Storage temperature	-10°C~60°C	Vibration scan rate	Oct/min ≤ 1

■ Product certifications

CE certification	EN55022 EN55024
FCC certification	PART15
EMC	Compliance with grade III industrial standard
Protection degree	IP65(Front panel)

www.mcgs.com.cn

BEIJING KUNLUN TONGTAI AUTOMATION SOFTWARE TECHNOLOGY CO.LTD.

 National Customer Service Hotline : **400-610-7062**

Beijing headquarters

F6 ,Yanhua Building , No.7 ,
Shangdi 6 Street , Haidian District
Beijing

Tel: +86-10-62979682
Fax: +86-10-62979059

Shanghai Office

Room 301 , No.5 , Lane 500 ,
Qingzhou Road , Shanghai
(against Everbright Convention
& Exhibition Center)

Tel: +86-21-64361488
Fax: +86-21-64366048

Shenzhen Office

F4, E building,Qiaon high-tech
industrial Park,Zhangkengjing Community,
Guanlan Town,Baoan Zone,Shenzhen

Tel: +86-755-26501649
Fax: +86-755-26508397

Jinan Customer Service Center

6-401 , Building B , No.3 ,
750 Shunhua Road , High-tech Development
Zone , Jinan

Tel: +86-531-87199936
Fax: +86-531-88685669

