

# 研华工业级人机界面 宽屏幕人机新助力 自动化的好帮手



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2012/06

研华中国自动化事业群产品经理

# 研华自动化所面对的行业

**Segmented Automation Panel Solutions**

As a leading provider of human machine interfaces, Advantech's HMI products are designed for segmented automation applications to be applied in different industries. With Advantech's HMI, we offer an integrated I/O and control features with HMIScada software which allows efficient and effective integration and open a new era of automation.

The central image shows a detailed 3D rendering of a modern industrial complex, likely a chemical or petrochemical plant, featuring large storage tanks, processing units, and piping systems. This central image is connected by green lines to nine surrounding industry-specific images:

- Mining**: An image showing a mining site with heavy machinery and a worker at a control station.
- Water treatment**: An image of a water treatment facility with circular clarifiers and control panels.
- BA**: An image of two workers in safety gear operating machinery.
- MA**: An image of a worker in a red shirt and yellow vest working at a control panel.
- FA**: An image of a factory floor with a conveyor belt and a control panel.
- Railway**: An image of a train car being loaded or unloaded.
- Energy**: An image of a worker in a hard hat at a control station.
- Oil & Gas**: An image of an oil rig or gas production facility.
- Marine**: An image of a person operating a ship's control system.

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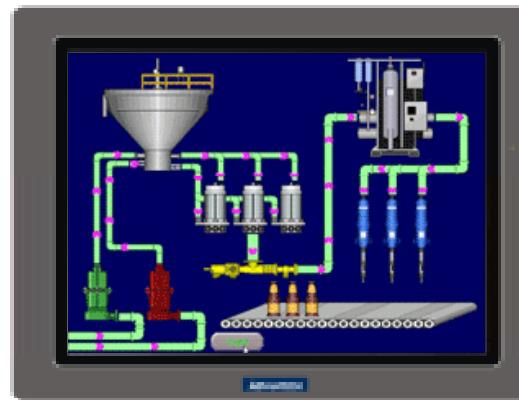
# 研华自动化-完整解决方案



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# 智能工业等级人机界面



监控, 控制 -> 信息传输

嵌入式操作系统 +  
API/SDK/Utility  
• 智能 / 除错 / 报警

HMI / SCADA 软件  
• 资料存储 / 监控  
• 通讯 / 信息化

总线通讯  
• 工业总线 / 探集  
• 控制



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# HMI 产品组合



FPM 系列  
工业级平版显示器

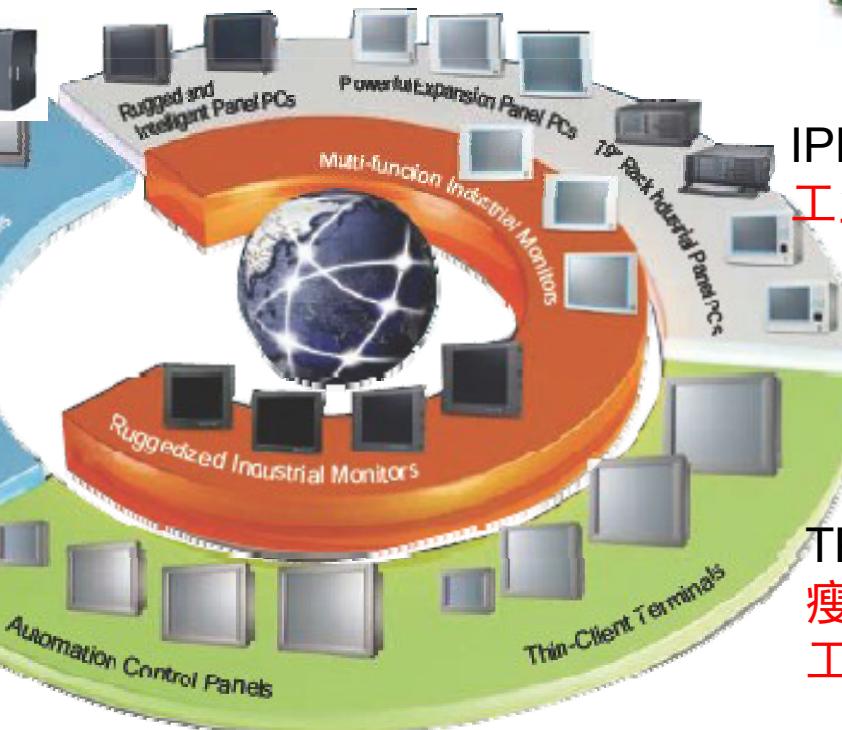


WebOP 系列  
工业级可编程人机界面

IPPC 系列  
工业级高效能平版电脑

TPC-71 系列  
控制 / 通讯  
工业级嵌入式平版电脑

TPC-50/51 系列  
瘦客户端  
工业级嵌入式平版电脑



6cm



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# TPC 工业等级嵌入式平板电脑



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# TPC – 工业等级嵌入式平板电脑

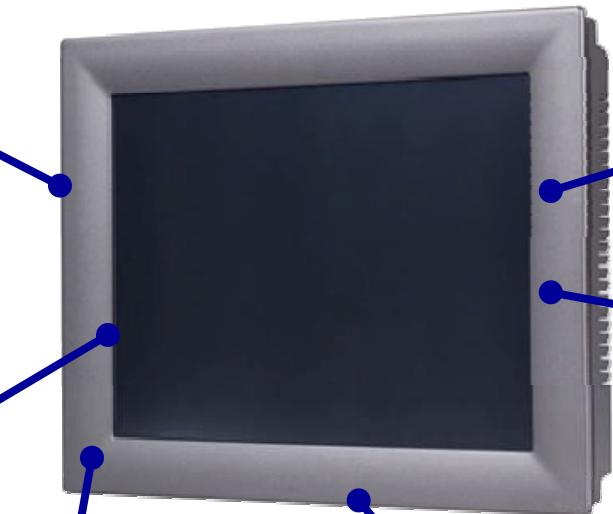
- 无风扇, 嵌入式
- 适用工业现场
- PC技术开放平台



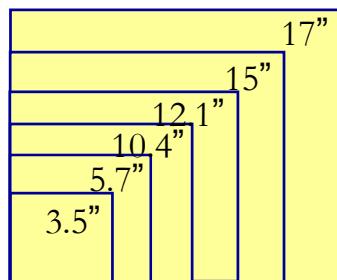
# TPC – 无风扇,嵌入式,工业规格,PC开放技术



铝合金前外壳



前面版 IP65 防水防尘



丰富的尺寸选择



LED背光技术,节能,省电  
寿命长达**50,000**小时



五线工业电阻屏  
平均单点使用**1000万**以上

多样的安装方式



台式

壁挂式

前面版

# TPC – 无风扇, 嵌入式, 工业规格, PC开放技术



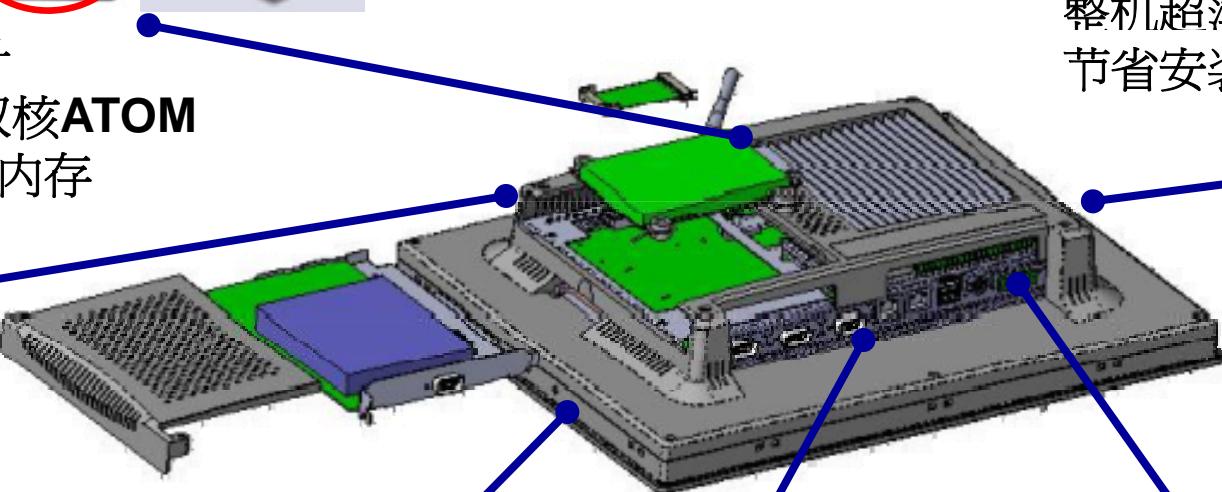
无风扇设计  
搭配版载双核**ATOM**  
CPU, 工业内存



工业零部件  
直逼**10**万小时无故障时间



宽温运行



IO向下接线  
节省空间



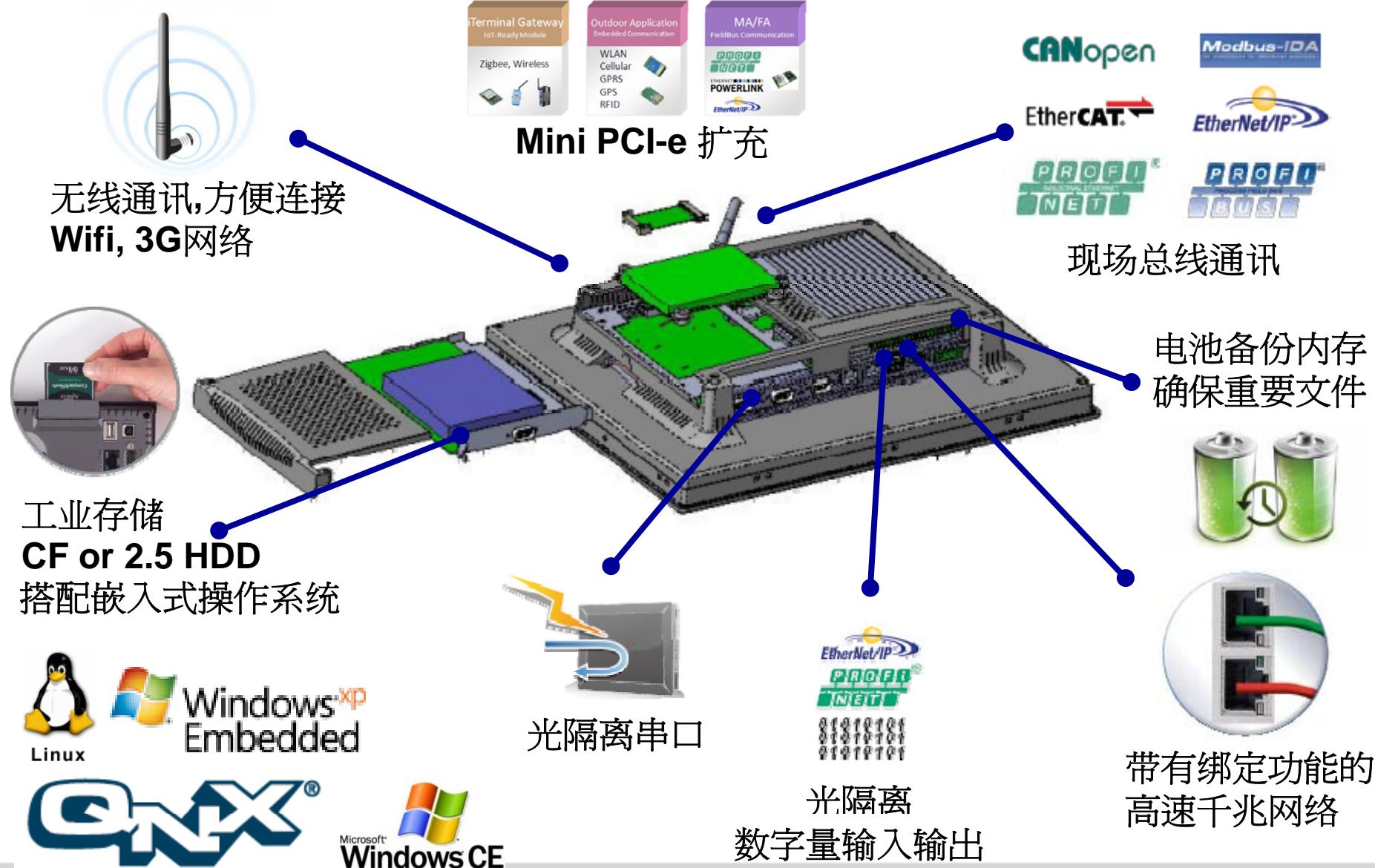
整机超薄设计  
节省安装空间



**9~32VDC**宽幅电压输入,  
带有良好的接地保护及  
保险丝



# TPC – 无风扇, 嵌入式, 工业规格, PC开放技术



# TPC-1071H,1271H,1571H 系列介绍



## SMILE SPEC

Atom D525 1.8GHz  
4G DDR3 Memory  
DUAL GiGa LAN  
CF & HDD(SATA)

## PRO. SPEC

Isolated 422/485 w/  
auto flow control  
8 DIO Ports  
PCIe / mPCIe Exp. Slot

- **TPC-1071H/ TPC-1271H/ TPC-1571H 三種尺寸提供**
- 全系列无风扇,稳定运行,高效双核**ATOM D525 1.8GHz**
- 结合工业IO,轻松连结现场总线通讯



# 瘦客户机专用 TPC-650H,1250H,1550H



- 0~50度的运行温度
- 高效能ATOM N270 1.6GHz CPU
- 6”,12”,15” LED背光模块
- 能源之星认证
- 10万小时的平均无故障时间



# TPC-650H,1250H,1550H 后视图



TPC-1250H



DC Input      2 x USB      PS/2  
2 x RS-232      Giga LAN



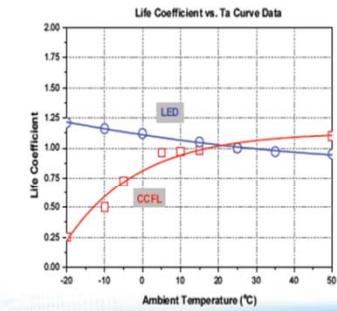
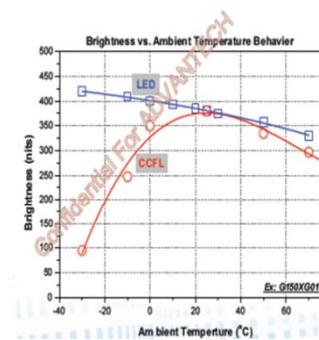
6cm



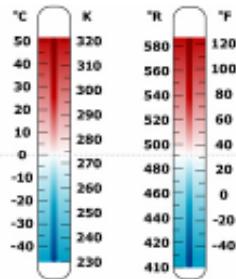
# 宽温稳定运行的 TPC-651H,1251H,1551H



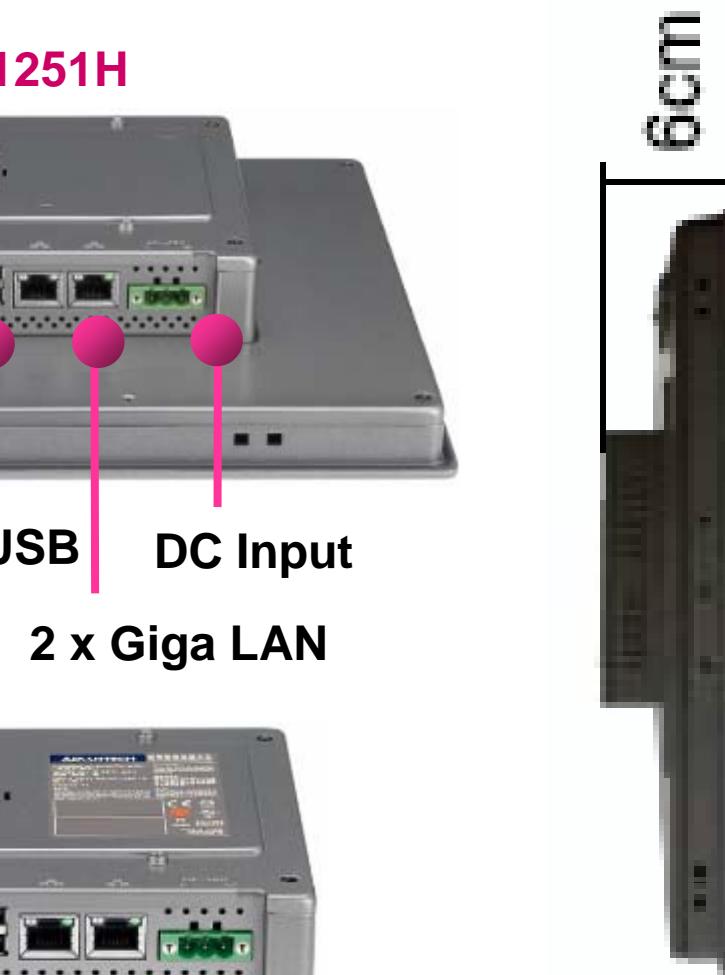
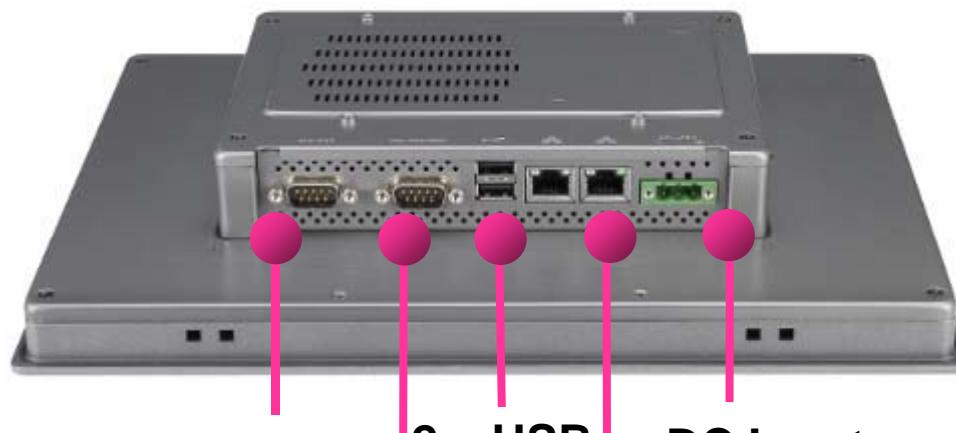
- -20~60度的运行温度
- 6”,12”,15” LED背光模块
- 低功耗ATOM Z510 1.33GHz CPU
- 能源之星认证
- 隔离串口, CF card
- 10万小时的平均无故障时间



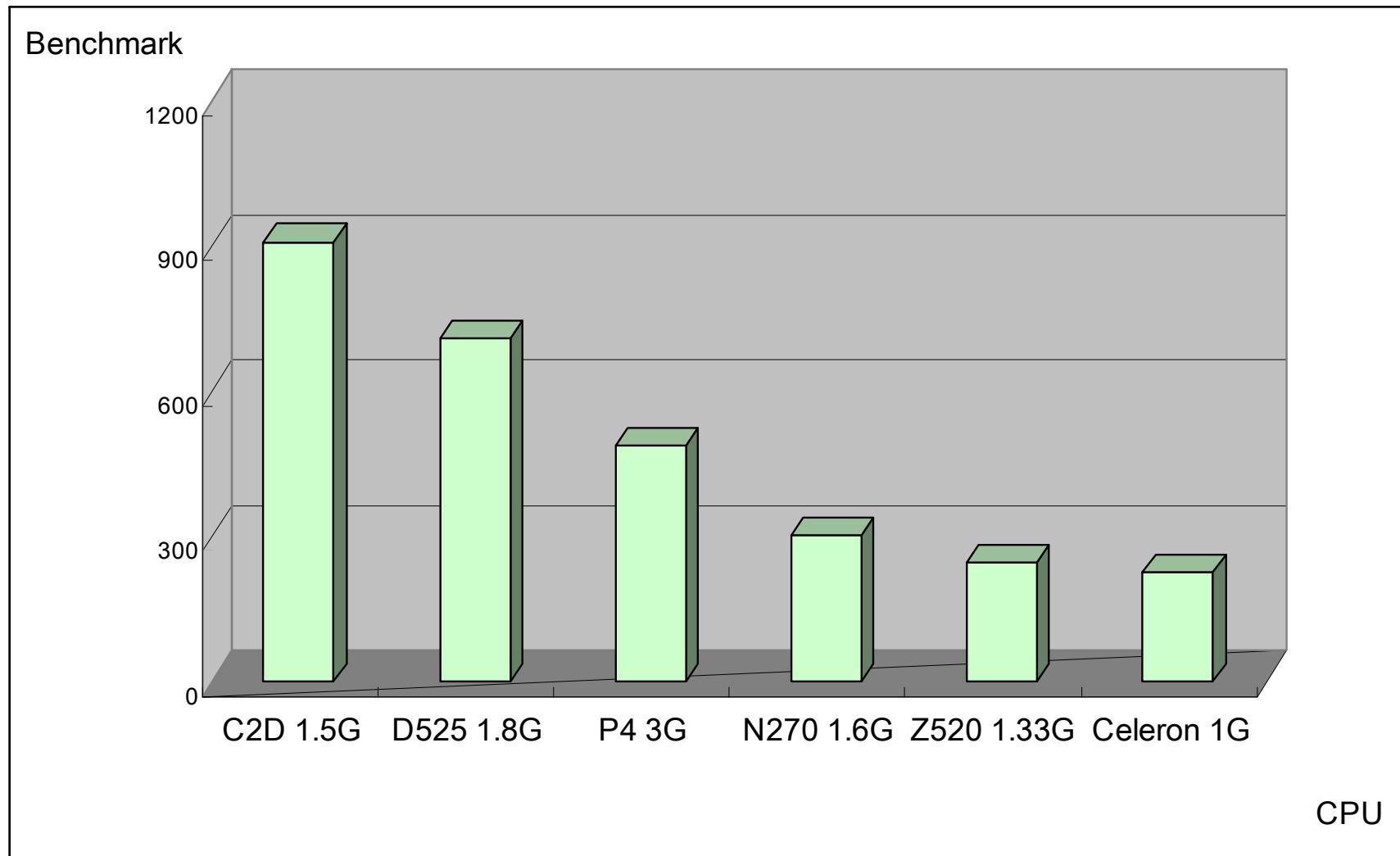
# TPC-651H,1251H,1551H 后视图



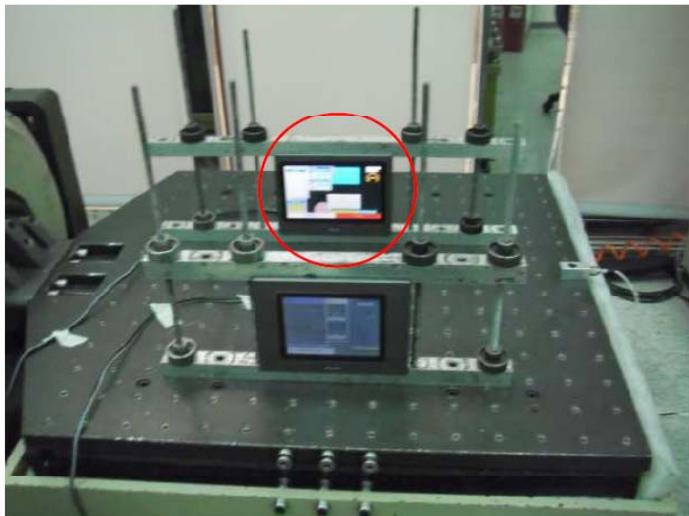
TPC-1251H



# 优越的嵌入式CPU处理能力



# 质量的保证 - 3C证书,CE,FCC,UL,产品内部测试



WOP-2070T X axis test photo

1. Test item list .....	2
2. Product specification entry .....	3
3. Product configuration photo.....	5
4. High temperature operation test .....	9
5. Low temperature operation test .....	12
6. High temperature & humidity storage test.....	15
7. Low temperature storage test.....	18
8. Humidity test .....	21
9. Temperature cycle test .....	24
10. Thermal profile test.....	27
11. Cold start test .....	30
12. Random vibration test.....	33
13. Sine vibration test.....	39
14. Package vibration test.....	45
15. Package drop test.....	51

## FCC 47 CFR PART 15 SUBPART B TEST REPORT

for

LCD Touch Control Panel



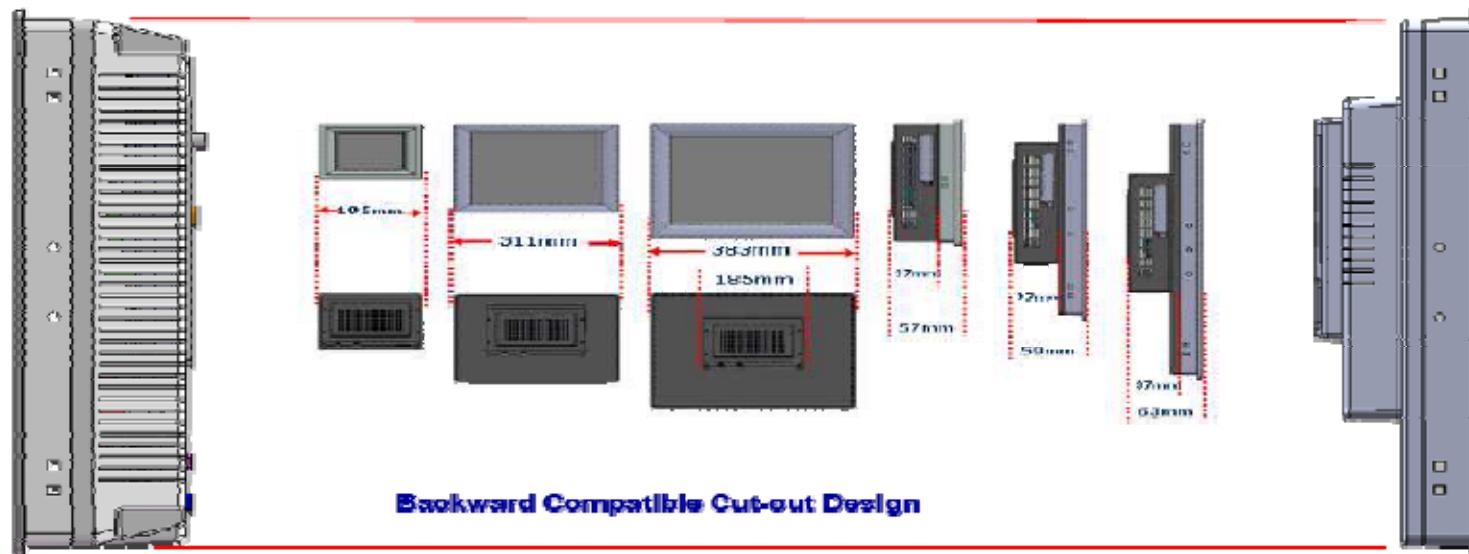
EC-Declaration of Conformity

For the following equipment:

LCD Touch Control Panel  
(Product Name)

# 您最信赖的伙伴 - 永远不用变更开孔尺寸

size:	1999	2003	2005	2010	2011	2011	
12"	TPC-1260	TPC-1261	TPC-1270	TPC 1250	TPC 1251	TPC-1271	
		TPC-120					
15"	TPC-1560		TPC-1570		TPC-1551	TPC-1571	
					TPC-1550		
5.7/6.4"	TPC-60SN	TPC-66SN		TPC-60T		TPC-61T	
		TPC-68T					
		TPC-660G	TPC-660E	TPC-650	TPC-651	TPC-671	
		TPC-662G					



# TPC已被众多软件厂商验证通过

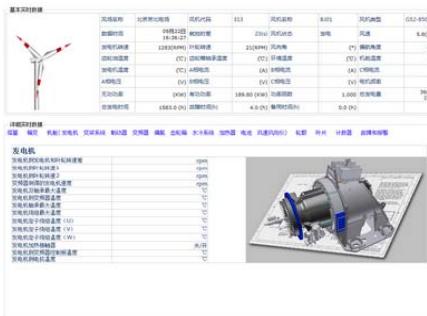
TPC's open platform are certificated by  
Many Application S/W partners...



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# TPC 致力于风场管理系统



风机塔基HMI



风机塔基交换机

# TPC for HVAC, Power



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# TPC for 太阳能设备



TPC-1570H  
无风扇嵌入式15"工业平板计算机



EKI-2525  
5端口非网管型工业以太网交换机



# TPC 研华电动车充电站解决方案

- 香港中电和香港电灯将于全港各区加设充电站, 其中中电率先设立21个充电站, 前期给市民提供免费充电服务。



# TPC 于汽车后装市场上的应用



汽车废气测试仪



汽车发动机综合性能分析仪



# TPC for 石化厂门禁系统, 汽车喷涂车间



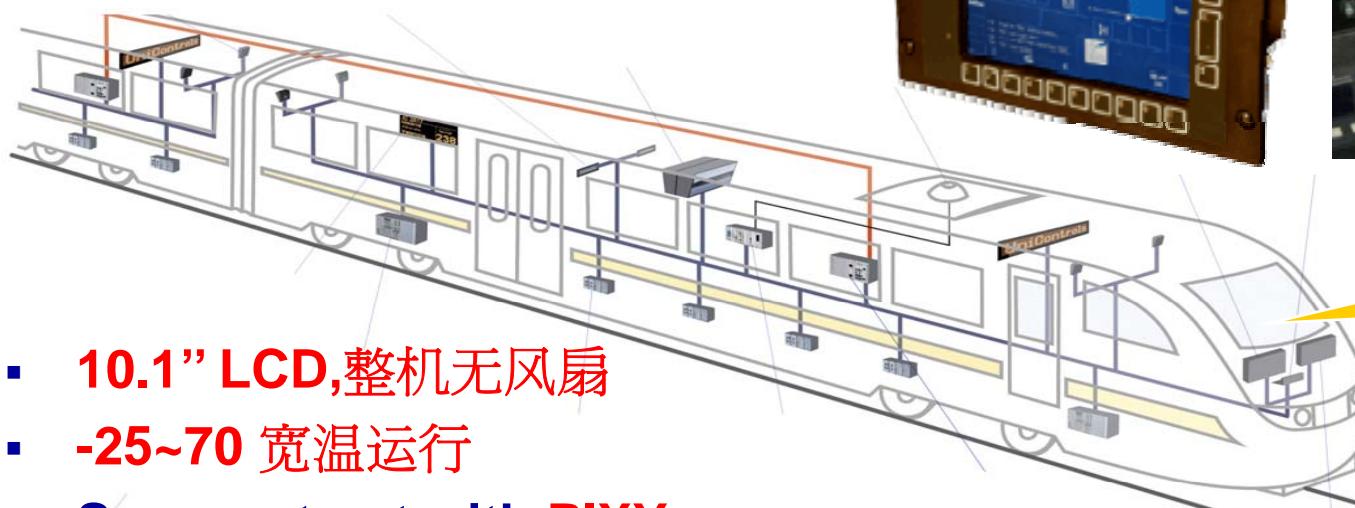
# TPC for 硫化机



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# 火车 - TPC-710D



列车控制  
HMI

- 10.1" LCD, 整机无风扇
- -25~70 宽温运行
- Same cut out with PIXY
- 支持列车控制台前面版安装方式, 并带有前置USB方便维护
- 所有IO接口皆为180度的直插设计方式, 节省空间
- 支持铁路专用电源110Vdc
- 电源及网络接口带有M12接头
- EN-50155 compliant



# TPC for 蛟龙号

潜航员叶聪、付文韬、刘开周（左起）在“蛟龙”号内 (8/8)



|

下载 | 已有18条评论 | 我要评论

8月18日，搭载我国首台自主设计、自主集成的深海载人潜水器“蛟龙”号5000米级海试团队的“向阳红09”船在完成历时49天，航程1万余海里的海试任务后，顺利返回江苏江阴苏南国际码头。新华社发（中国大洋协会供图）

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# WebOP 工业等级可编程人机界面



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# WebOP-2000T 可编程工业等级人机界面



- 具有丰富的显示尺寸选择 (3.5"~12")
- 多种的网络连接能力 (RS232/422/485, USB Host/Client, Ethernet)
- 强大,友好,免费的组态软件(WebOP designer)
- 支持超过300种PLC驱动
- 前面板符合IP66设计,防尘防水
- 超过百种成功应用案例

# 研华人机界面市场定位



# WebOP-2000T 机种组合

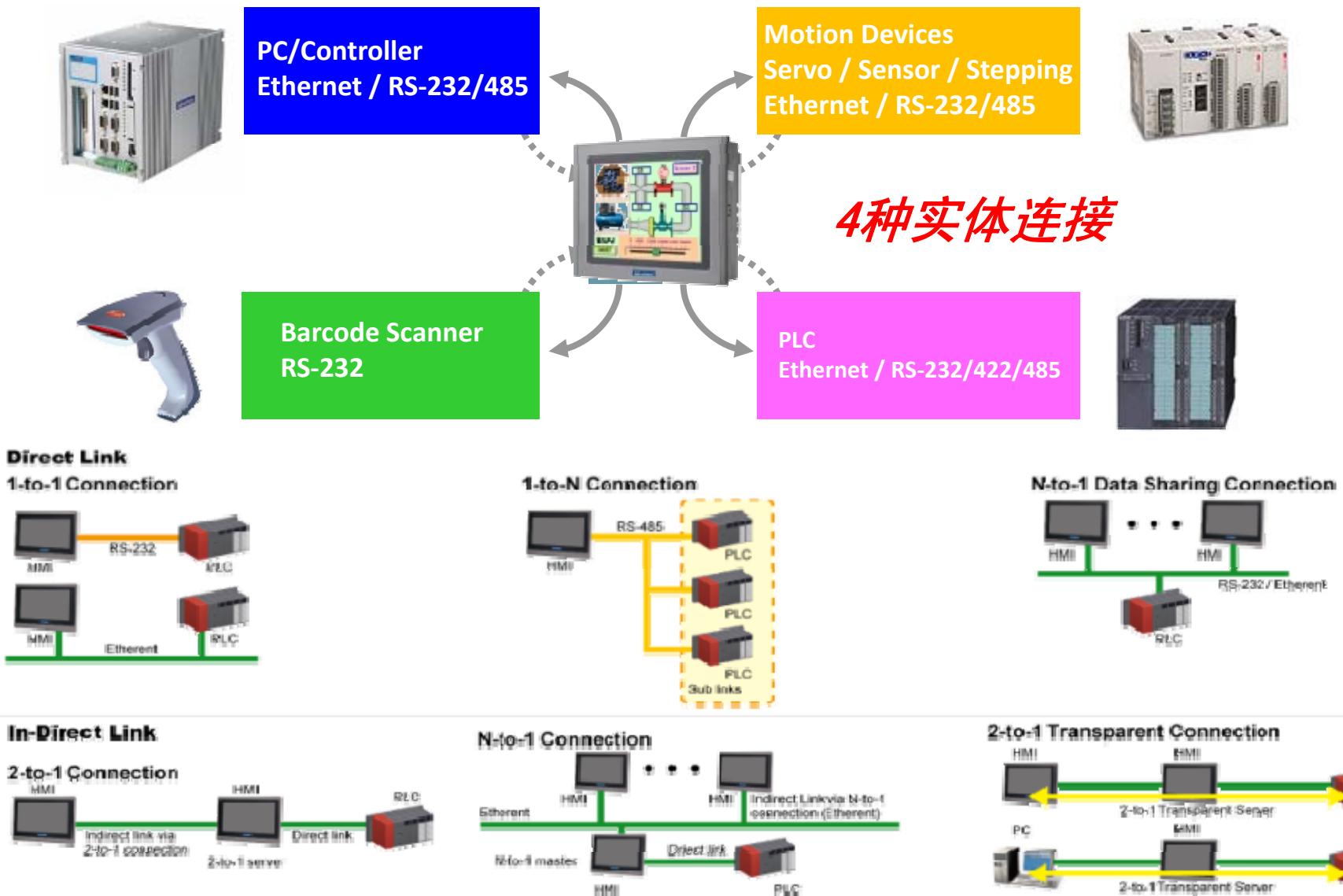
Model	4.3"	5.6"	7"	8"	10.1"				
	WOP-2040T	WOP-2050T	WOP-2070T	WOP-2080T	WOP-2100T				
Display	TFT LCD, 65535 Colors								
Resolution	480 x 272	320 x 234	800 x 480	800 x 600	1024x 600				
CPU	ARM 9 200MHz RISC 32-bit CPU								
Memory	32MB working memory		64MB working memory						
OS	RTOS + WebOP Designer 2.0								
Power Consumption	5W		10W						
Aspect Ratio	16:9		4:3	16:9		4:3	16:9		
Sub-Model	S1AE	N1AE	S1AE	S2AE	N2AE	S2AE	N2AE	S2AE	N2AE
Ethernet	-	✓	-	-	✓	-	✓	-	✓
128M NAND-Flash	-	✓	✓	-	✓	-	✓	-	✓
Micro-SD Slot	-	✓	✓	-	✓	-	✓	-	✓
USB Client/Host	✓	✓	✓	✓	✓	✓	✓	✓	✓

- New wide-screen selections of display
- More Slim & Compact & Performance
- Full line-up 65,536 –Color TFT-LCD
- Over 300 models of PLC Supported
- Enlarged program working memory (128MB)\*
- Front Panel IP66 Protection
- Flexible program upgrade via Serial, Ethernet, USB or Micro-SD.
- Low power consumption design.



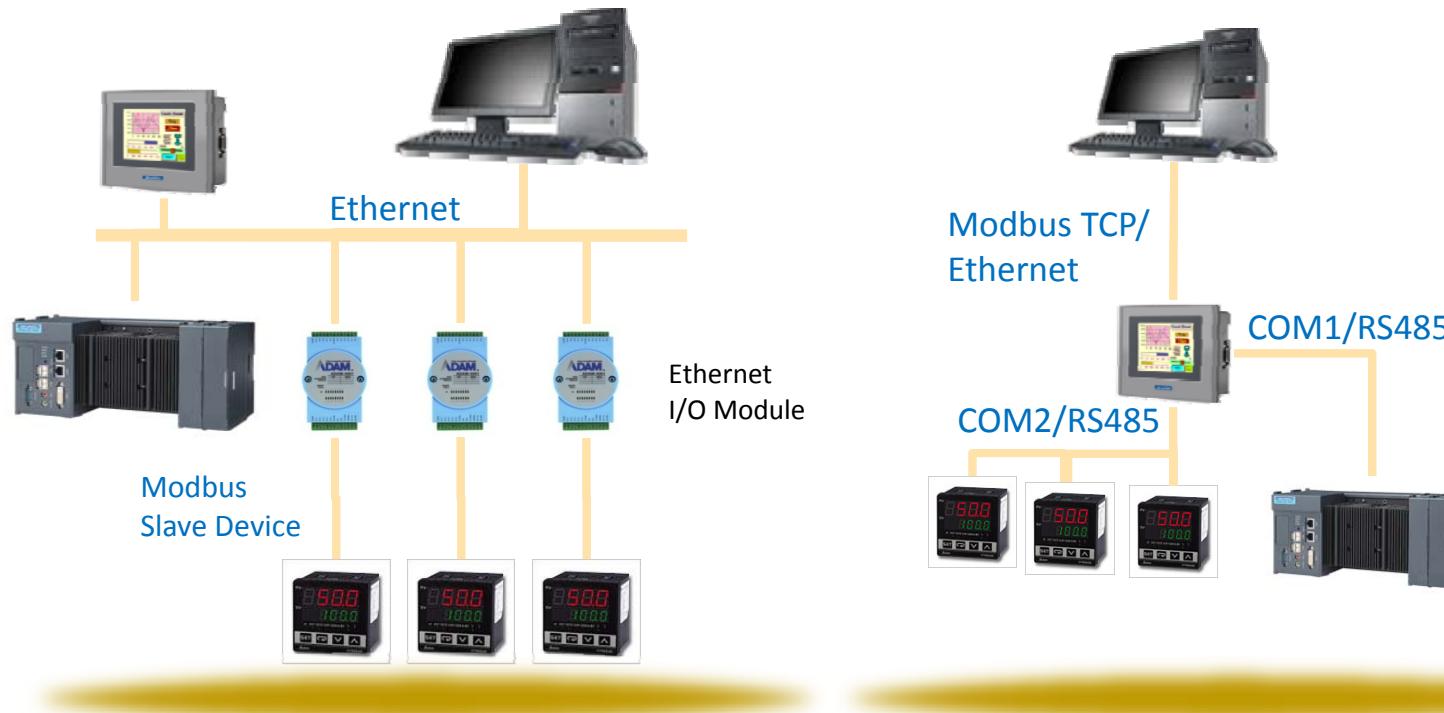
\*Available on selected models

# 丰富的网络功能



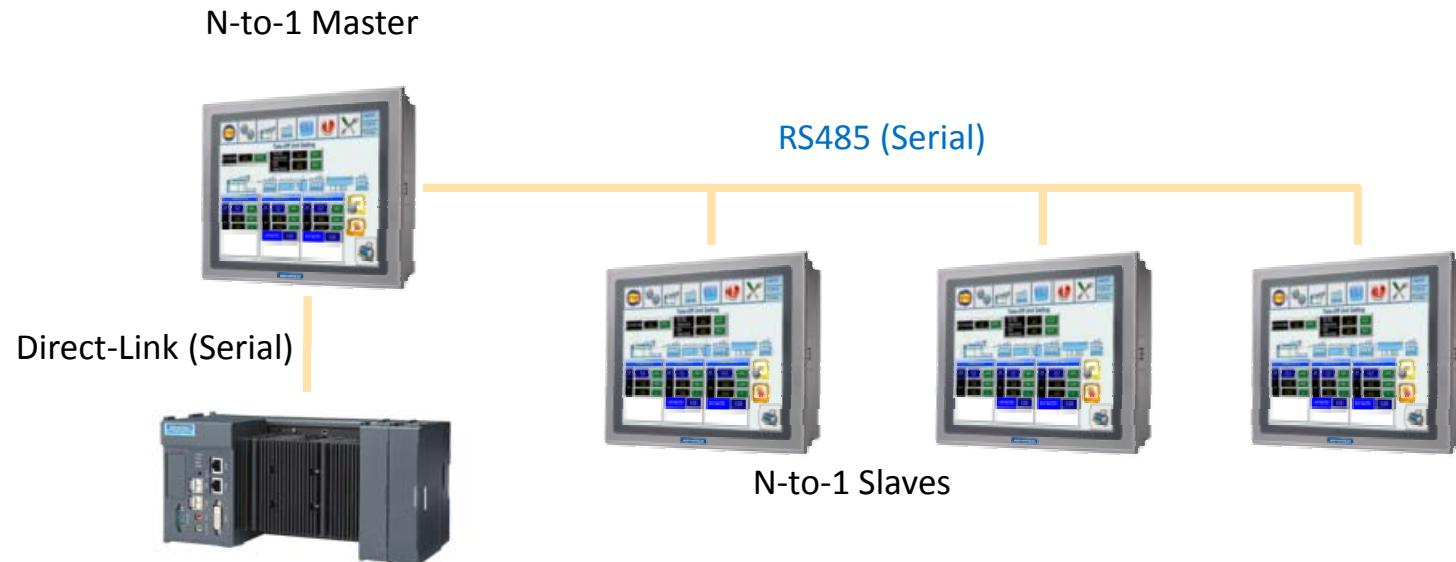
# 强大网关功能

New Feature  
in V 1.2.91



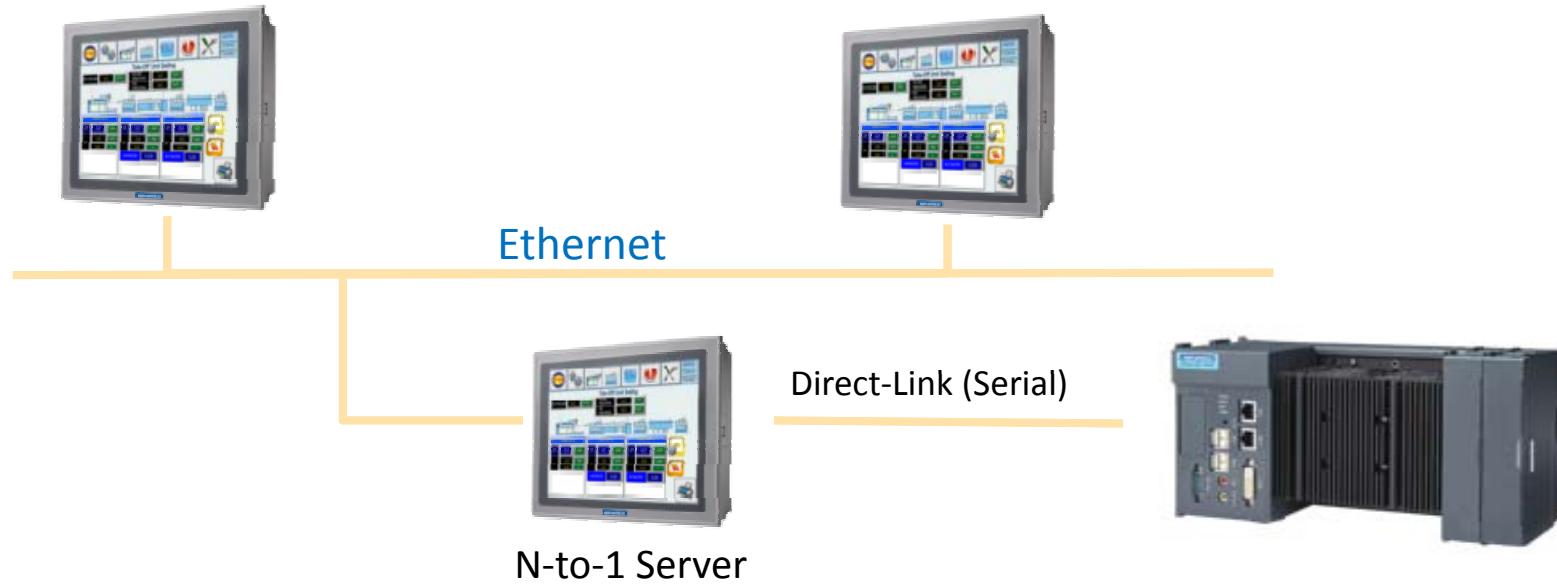
- The traditional Ethernet structure requires every single device to be connected on Ethernet for PC to communicate and monitor.
- WebOP 2000 can replace Ethernet gateway and greatly simplify the connection.
- No more purchase or dedicated Ethernet gateway anymore!

# 支持RS-485多点连结



- WebOP 2000 supports Serial Port N-to-1 connection (Tree & Daisy Chain)
- Serve the need for multi-location control to one controller without Ethernet
- Hot-Swap and Maintenance can be done without interrupting operation (Tree)
- The connection supports up to 16 slaves.
- 3 sets of WebOP as slaves (or less) are recommended.

# 支持网络多点连结



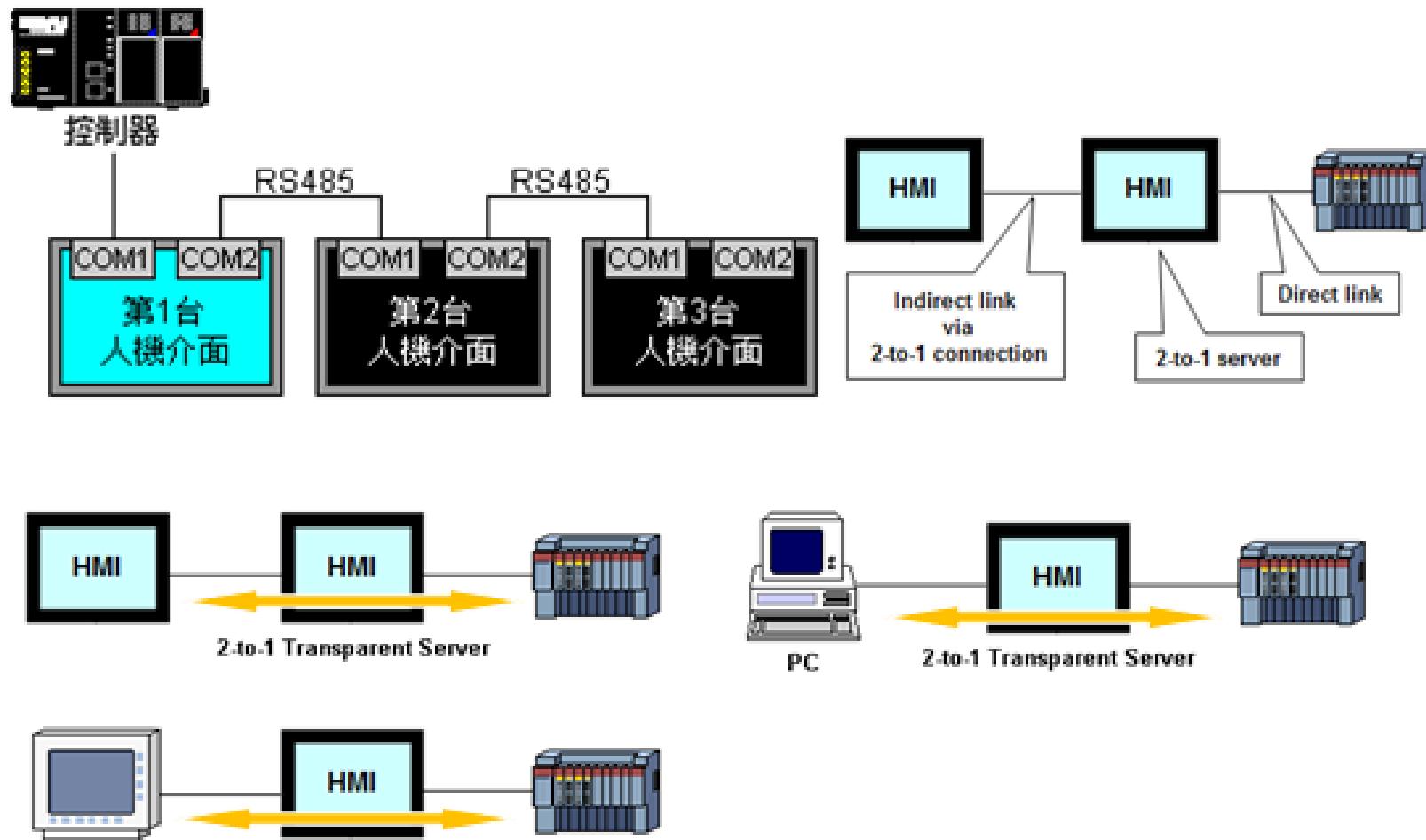
- WebOP 2000 supports Ethernet N-to-1 connection
- Serve the need for multi-location control to one controller through Ethernet
- Hot-Swap and Maintenance can be done without interrupting operation
- The connection supports up to 16 slaves.
- 3 sets of WebOP as slaves (or less) are recommended.

# 灵活的应用程序更新与下载



- 透过串行端口、以太网络、USB接口及Micro SD进行规划数据下载
- 在不易携带计算机, 进行程序更新之环境, 可使用随身碟或Micro-SD卡

# 便利性高的穿透通讯



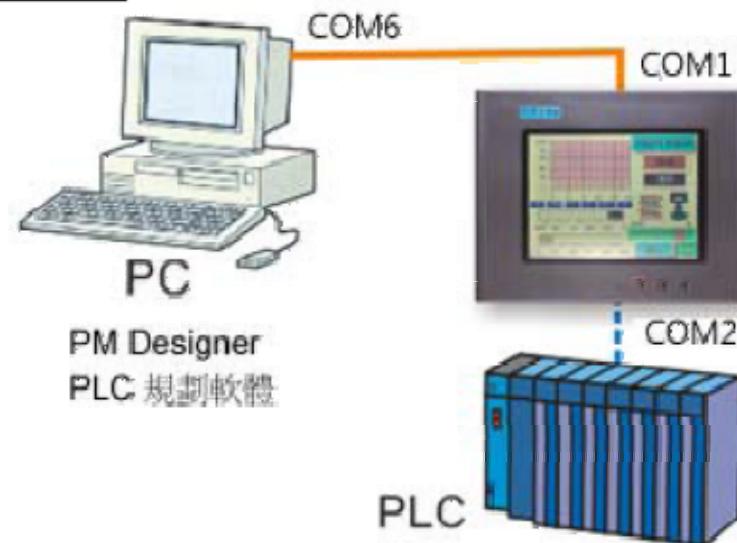
# 穿透通讯设置



WebOP-Designer及三菱PLC規

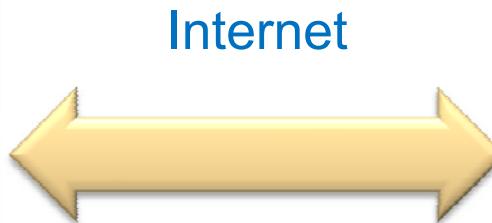
劃軟體(GX Developer)通訊

埠，同時使用 COM6



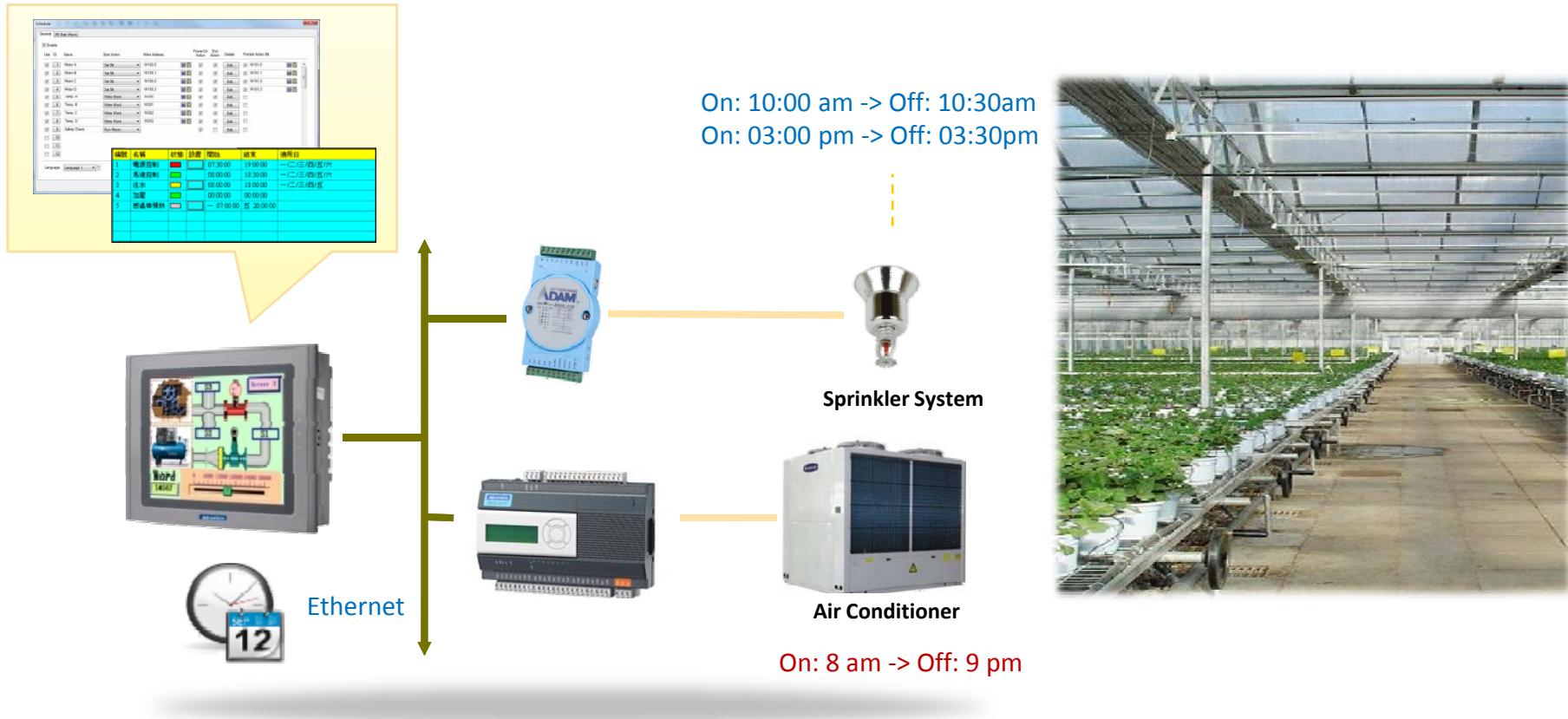
穿透通讯功能提供设计者直接使用触控屏当成介质透过HMI之  
Com1/Com2/Com3串口连接PLC. 另外一个端口直接将PLC通讯传出供其它通讯设备或计算机联机使用.

# 中控台维护与控制(VNC)



- VNC server support WebOP **remote access & control** via Internet.
- **Accessing, viewing , and controlling** WebOP from remote PC using off-shelf VNC software
- Release with WebOP Designer 2.0 V1.3

# 轻易达成排程与配方功能



- WebOP 2000 support up to 48 schedules to switch on/off controllers and I/O
- Save the efforts of programming separate controllers for scheduling operation

# 支持超过300种PLC连接与驱动



- Support Advantech ADAM-4000/5000/6000 Series, BAS-3000 Series,
- Supports 261 models of PLC Supplier via COM port from over 100 suppliers
  - Siemens – Simatic S7-200/300 series
  - Mitsubishi – Melsec-FX/Q series
- Supports 40 models of PLC via Ethernet ports from 21 suppliers
  - AB – MicroLogix 1000/1500 via 1761-NET-ENI
  - Honeywell – BACnet/IP
  - Omron – Sysmac CS/CJ series FINS/TCP
  - Siemens – Simatic S7-300/1200 Ethernet Module (CP343)

# 支持最新西门子 S7-1200 PLC

## Serial Port (Direct Link)

General	Parameter
Link Number:	1
Link Name:	S7-200 MPI
Link Type:	Direct Link (COM)
Device/Server:	Siemens AG
Link Port:	COM1 (S7-200 MPI)



S7-200 PPI Port



S7-300 MPI Port

No Converter Needed  
Daisy Chain connection

## Ethernet Port

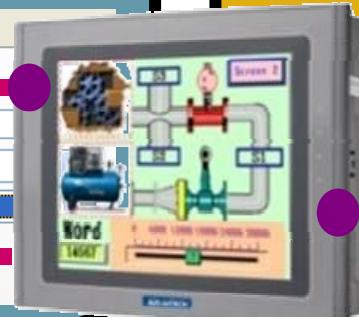
General	Parameter
Link Number:	1
Link Name:	S7-1200 Ethernet
Link Type:	Direct Link (Ethernet)
Device/Server:	Siemens AG
Link Port:	Ethernet1



S7-1200 Profinet Port

General	Parameter
Link Number:	1
Link Name:	S7-300 MPI
Link Type:	Direct Link (COM)
Device/Server:	Siemens AG
Link Port:	COM1 (S7-300 MPI)

**MPI Port**



**Ethernet**

# 与PLC联机之详细说明

- TECH NOTE recorded detailed procedure to help you to connect to every PLCs when replacement.
- Up to date 31 TECH NOTES in CD Disc & Keeping update in Advantech continuously



Doc#	Brand/Model Supports
TN502D	Mitsubishi_FX485BD_E0
TN508D	TECO_TSTA_AC_Servo_C0
TN504D	SAIA_PCD3_C0
TN504D	SAIA_PCD3_E0
TN505D	Jetter_JC243W_C0
TN506D	Hitachi_MicroEH_E0
TN507D	Hitachi_EHV_E0
TN508D	IDEC_FC4A_FC5A_E0
TN509D	Q00J_CPU_E0
TN510D	OMRONCP1L_CP1H_C0
TN510D	OMRONCP1L_CP1H_E0
TN511D	Siemens_MPI_E0
TN512D	Siemens_PPI_E0
TN513D	Mitsubishi_FX2_E0
TN514D	Mitsubishi_FX2n_FX3U_E0
TN515D	Mitsubishi_Q_Ethernet_E0
TN516D	Hitachi_Ethernet_E1
TN517D	VIGOR_C0
TN518D	Siemens_S5_CPU_E0
TN519D	Q_Link_Module_E0
TN520D	AB_SLC_DF1_C0
TN521D	LGK120S_C0
TN521D	LGK120S_E0
TN522D	DELTA_ES_C0
TN523D	fatek_FBs_C0
TN524D	Yaskawa_MP_ModbusTCP_E0
TN525D	Yaskawa_MP_Memobus_E0
TN526D	LUST_ServoC_E0

# 完美的内存及闪存配置



- Front panel enhance design in **IP66** protection.



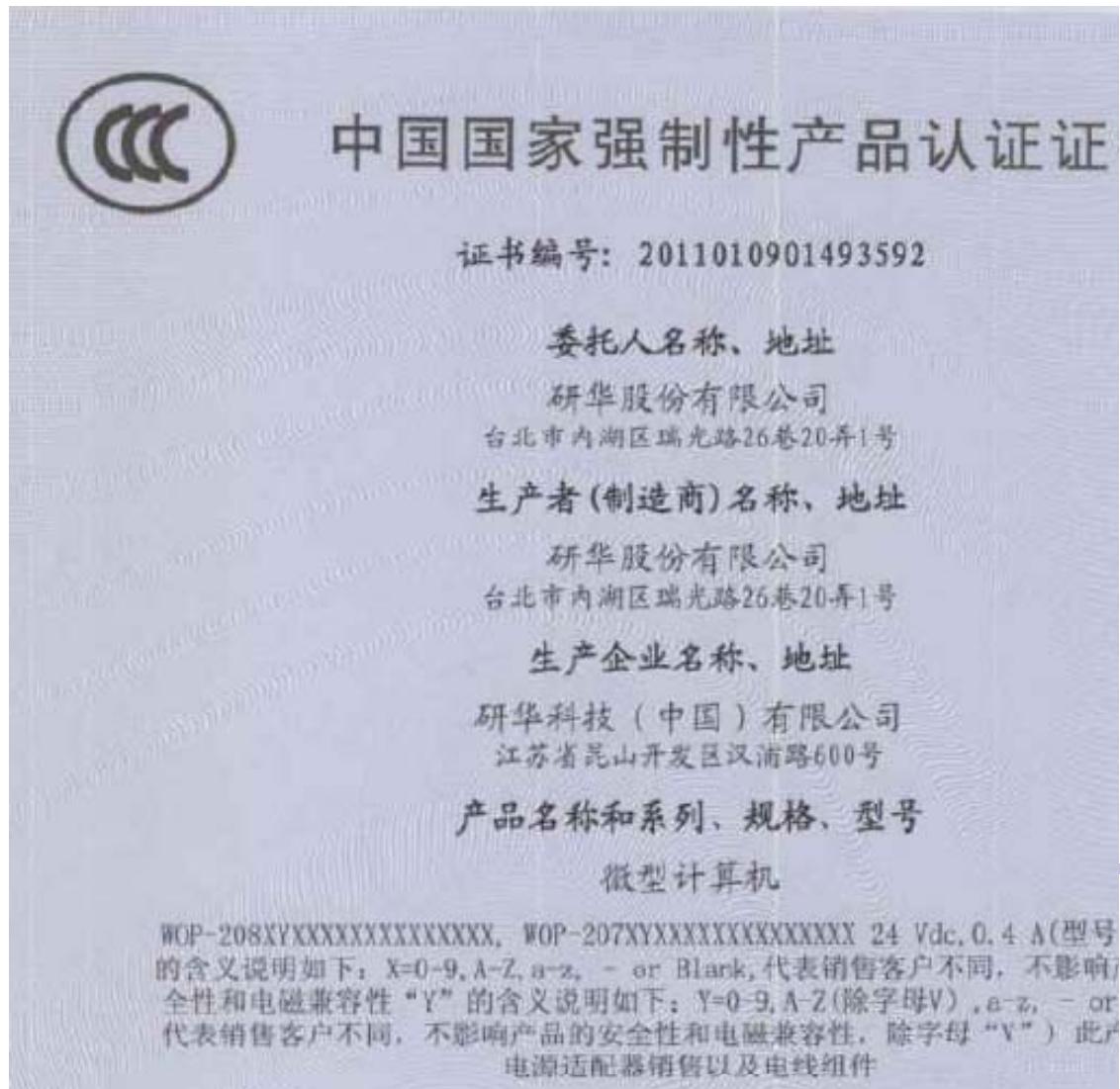
**IPX5**



**IPX6**

#### Liquids, second digit (IPX5 / IPX6)

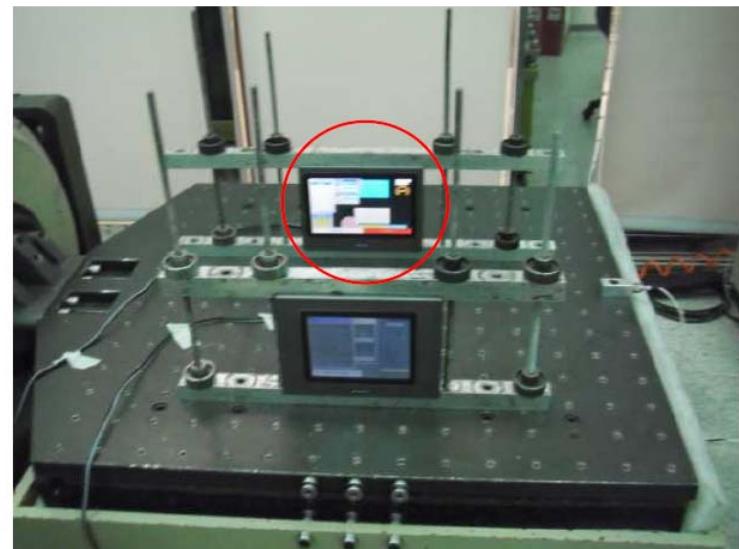
<b>Level</b>	<b>Protected against</b>	<b>Testing for</b>
<b>5</b>	Water jets	Water projected by a nozzle (6.3mm) against enclosure from any direction shall have no harmful effects. Test duration: at least 3 minutes Water volume: <b>12.5 liters</b> per minute Pressure: <b>30 kN/m<sup>2</sup></b> at distance of 3m
	Powerful water jets	Water projected in powerful jets (12.5mm nozzle) against the enclosure from any direction shall have no harmful effects. Test duration: at least 3 minutes Water volume: <b>100 liters</b> per minute Pressure: <b>100 kN/m<sup>2</sup></b> at distance of 3m
<b>6</b>		



**Conclusion :**

**Passed.**

The WOP-2070T meets random vibration operation test.



WOP-2070T X axis test photo



**EC-Declaration of Conformity**

For the following equipment:

LCD Touch Control Panel

(Product Name)

**FCC 47 CFR PART 15 SUBPART B  
TEST REPORT**

for

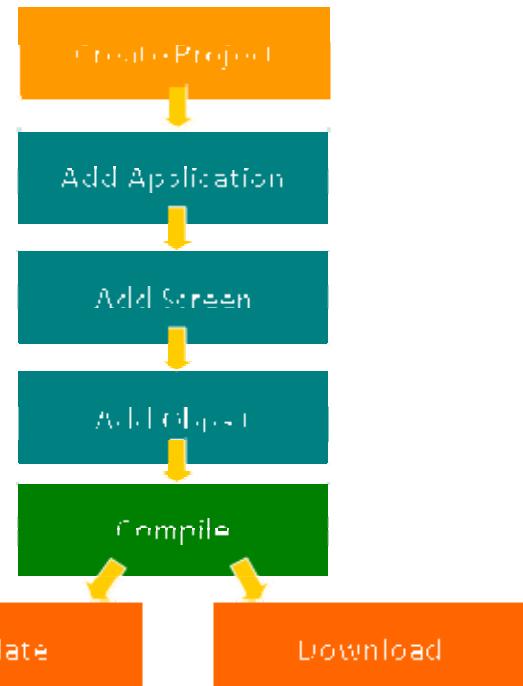
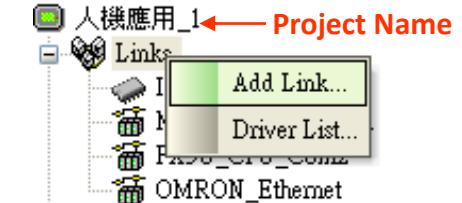
**LCD Touch Control Panel**

# 强大的组态软件WebOP Designer 2.0

- Microsoft Windows XP/Vista/7 Based
- Friendly Development Interface & Tools
  - Windows-Like interface, easy to getting start with development
  - Multiple-Language support –
    - English, Traditional Chinese, Simplified Chinese.
  - Graphical Tree-structure workspace interface
- Rich Graphic Control Components such as switch, light..etc and support **bmp/jpg/gif/wmf** format customized photos
- History Trend Chart Analysis
- Data collect, character edit and program transfer by USB without using PC
- Update the program by Ethernet
- Software & Hardware compatibility, easy change different WOP model, don't need reprogram again.

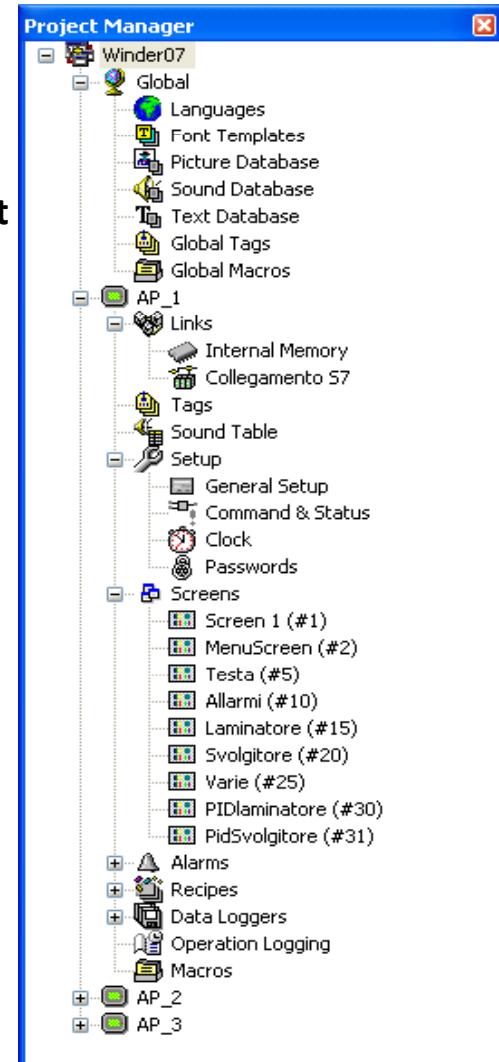
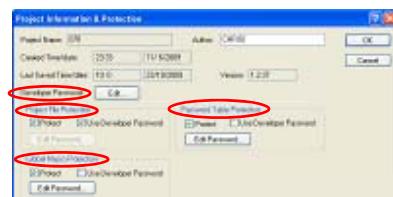


# 简易步骤轻松完成PLC连接设定



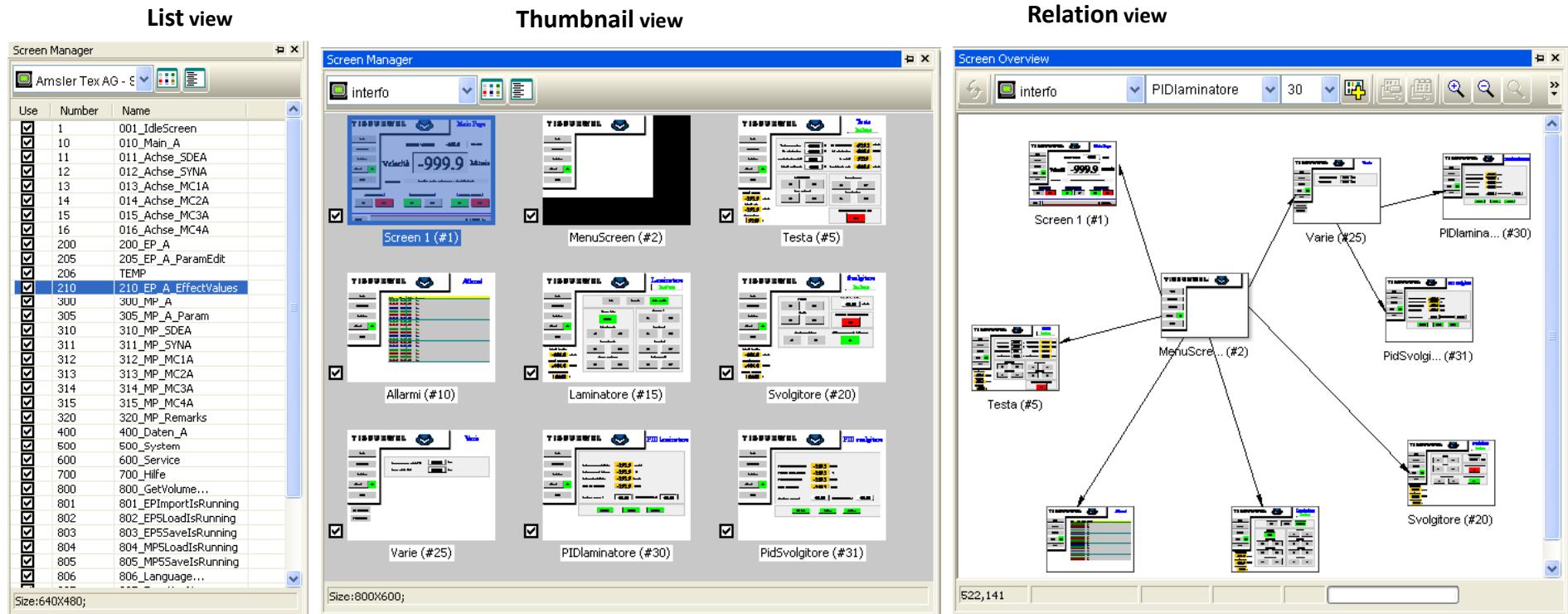
# 项目式结构管理 可同时管理多项应用程序

- Multiple HMI applications in one project
- One project one file
  - Easy to maintain and transport
- Global settings and resources sharable to all applications of the same project
  - Multi-languages (up to 10 languages)
  - Font templates (up to 20 fonts for each language)
  - Picture database (**BMP, JPG, GIF, WMF**)
  - Sound database (WAV)
  - Text Database
  - Global Tags, Global Macros
- Easy to accumulate/reuse design achievements
  - Object Library
    - Default objects, Common objects, Object groups, Global objects
  - Import/Export Functions
    - Language setting, Font templates, Pictures, Sounds, Text, Tags, Macros, Application, Screen, Alarm messages, Control block and status word settings, etc.
- Designs can be protected



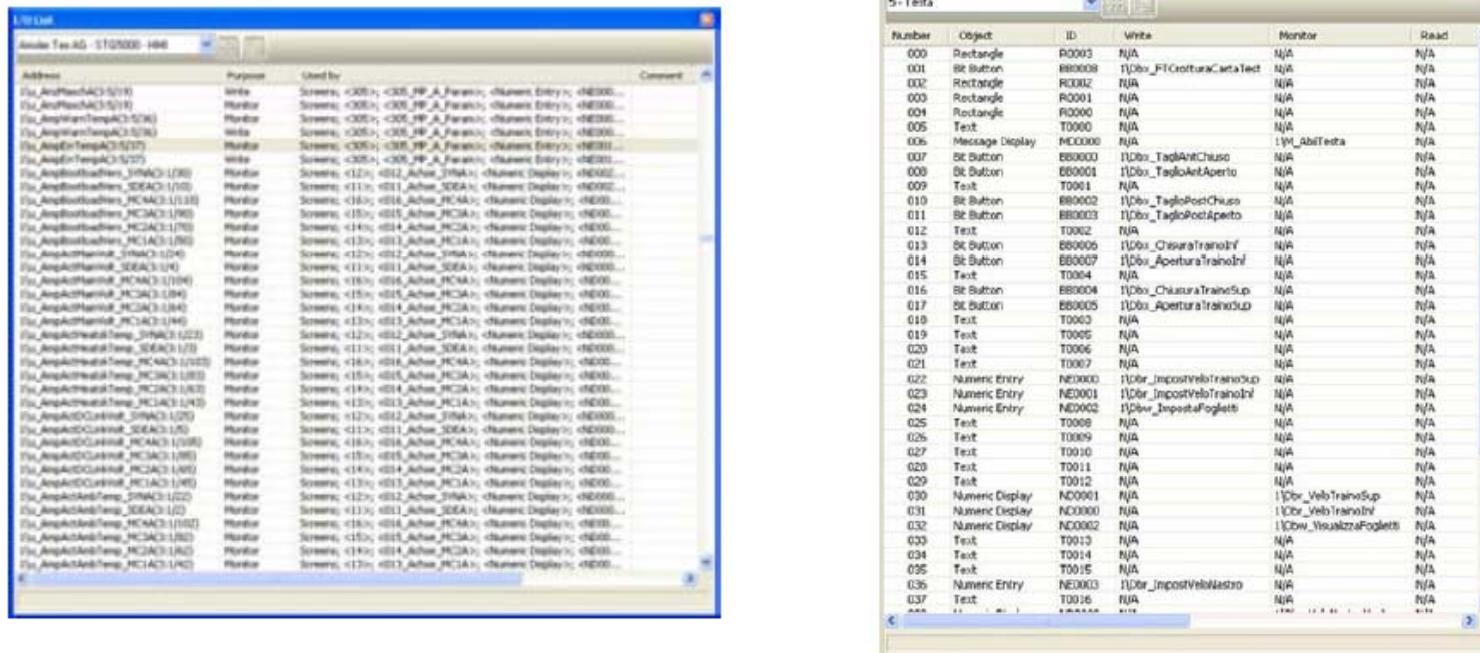
# 智能屏幕管理 直观快捷对程序进行编辑/管理

- Real time screen editor
- 8 toolbars to accelerate screen creation process
- Screen Manager. It can be List, graphical, relation indication.



# 组件列表 & I/O编辑器

- 列表方式展示所有组件，显示I/O关联并可对这张列表中对I/O连接直接进行编辑和修改。
- 将所有的I/O端口都记录在同一列表上，双击某I/O即可显示其属性对话框，直接查看其连接状态或进行修改



The image displays two windows side-by-side. The left window is titled 'I/O List' and shows a detailed table of components and their I/O associations. The right window is titled 'Object List' and shows a similar list of objects, likely graphical components, with their properties and connections.

Address	Properties	User By	Comment
Fls_AngInTempAC1(1/1)	Inputs	Screens: <000>, <001>, Fls_A_Parafisi, Element_Entry, <000000>	
Fls_AngInTempAC1(2/1)	Monitor	Screens: <000>, <001>, Fls_A_Parafisi, Element_Entry, <000000>	
Fls_AngInTempAC1(3/1)	Monitor	Screens: <000>, <001>, Fls_A_Parafisi, Element_Entry, <000000>	
Fls_AngInTempAC1(4/1)	Monitor	Screens: <000>, <001>, Fls_A_Parafisi, Element_Entry, <000000>	
Fls_AngInTempAC1(5/1)	Monitor	Screens: <000>, <001>, Fls_A_Parafisi, Element_Entry, <000000>	
Fls_AngInTempAC1(6/1)	Monitor	Screens: <000>, <001>, Fls_A_Parafisi, Element_Entry, <000000>	
Fls_AngInTempAC1(7/1)	Monitor	Screens: <000>, <001>, Fls_A_Parafisi, Element_Entry, <000000>	
Fls_AngInTempAC1(8/1)	Monitor	Screens: <000>, <001>, Fls_A_Parafisi, Element_Entry, <000000>	
Fls_AngInTempAC1(9/1)	Monitor	Screens: <000>, <001>, Fls_A_Parafisi, Element_Entry, <000000>	
Fls_AngInTempAC1(10/1)	Monitor	Screens: <000>, <002>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(11/1)	Monitor	Screens: <000>, <002>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(12/1)	Monitor	Screens: <000>, <003>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(13/1)	Monitor	Screens: <000>, <004>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(14/1)	Monitor	Screens: <000>, <005>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(15/1)	Monitor	Screens: <000>, <006>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(16/1)	Monitor	Screens: <000>, <007>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(17/1)	Monitor	Screens: <000>, <008>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(18/1)	Monitor	Screens: <000>, <009>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(19/1)	Monitor	Screens: <000>, <010>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(20/1)	Monitor	Screens: <000>, <011>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(21/1)	Monitor	Screens: <000>, <012>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(22/1)	Monitor	Screens: <000>, <013>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(23/1)	Monitor	Screens: <000>, <014>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(24/1)	Monitor	Screens: <000>, <015>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(25/1)	Monitor	Screens: <000>, <016>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(26/1)	Monitor	Screens: <000>, <017>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(27/1)	Monitor	Screens: <000>, <018>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(28/1)	Monitor	Screens: <000>, <019>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(29/1)	Monitor	Screens: <000>, <020>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(30/1)	Monitor	Screens: <000>, <021>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(31/1)	Monitor	Screens: <000>, <022>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(32/1)	Monitor	Screens: <000>, <023>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(33/1)	Monitor	Screens: <000>, <024>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(34/1)	Monitor	Screens: <000>, <025>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(35/1)	Monitor	Screens: <000>, <026>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(36/1)	Monitor	Screens: <000>, <027>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(37/1)	Monitor	Screens: <000>, <028>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(38/1)	Monitor	Screens: <000>, <029>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(39/1)	Monitor	Screens: <000>, <030>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(40/1)	Monitor	Screens: <000>, <031>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(41/1)	Monitor	Screens: <000>, <032>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(42/1)	Monitor	Screens: <000>, <033>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(43/1)	Monitor	Screens: <000>, <034>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(44/1)	Monitor	Screens: <000>, <035>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(45/1)	Monitor	Screens: <000>, <036>, Action_2194x1, Numeric_Display, <000000>	
Fls_AngInTempAC1(46/1)	Monitor	Screens: <000>, <037>, Action_2194x1, Numeric_Display, <000000>	

Number	Object	ID	Write	Monitor	Read
000	Rectangle	P0003	N/A	I/Obr_FCreazioneCerchio	N/A
001	Bit Button	B00009	I/Obr_FTConfiguraCerchio	N/A	N/A
002	Rectangle	P0002	N/A	N/A	N/A
003	Rectangle	P0001	N/A	N/A	N/A
004	Text	T0000	N/A	N/A	N/A
005	Text	T0000	N/A	I/W_AbilTesta	N/A
006	Message Display	M0000	N/A	N/A	N/A
007	Bit Button	B00000	I/Obr_ToggleAntChiuso	N/A	N/A
008	Bit Button	B00001	I/Obr_ToggleAntAperto	N/A	N/A
009	Text	T0001	N/A	N/A	N/A
010	Bit Button	B00002	I/Obr_TogglePostChiuso	N/A	N/A
011	Bit Button	B00003	I/Obr_TogglePostAperto	N/A	N/A
012	Text	T0002	N/A	N/A	N/A
013	Bit Button	B00005	I/Obr_ChiusuraTrainoInf	N/A	N/A
014	Bit Button	B00007	I/Obr_AperturaTrainoInf	N/A	N/A
015	Text	T0004	N/A	N/A	N/A
016	Bit Button	B00004	I/Obr_ChiusuraTrainoSup	N/A	N/A
017	Bit Button	B00005	I/Obr_AperturaTrainoSup	N/A	N/A
018	Text	T0003	N/A	N/A	N/A
019	Text	T0005	N/A	N/A	N/A
020	Text	T0006	N/A	N/A	N/A
021	Text	T0007	N/A	N/A	N/A
022	Numeric Entry	NE0000	I/Obr_ImpostaVelTrainoSup	N/A	N/A
023	Numeric Entry	NE0001	I/Obr_ImpostaVelTrainoInf	N/A	N/A
024	Numeric Entry	NE0002	I/Obr_ImpostaPoglett	N/A	N/A
025	Text	T0008	N/A	N/A	N/A
026	Text	T0009	N/A	N/A	N/A
027	Text	T0010	N/A	N/A	N/A
028	Text	T0011	N/A	N/A	N/A
029	Text	T0012	N/A	N/A	N/A
030	Numeric Display	ND0001	N/A	I/Obr_VelTrainoSup	N/A
031	Numeric Display	ND0000	N/A	I/Obr_VelTrainoInf	N/A
032	Numeric Display	ND0002	N/A	I/Obr_VisualizzaPoglett	N/A
033	Text	T0013	N/A	N/A	N/A
034	Text	T0014	N/A	N/A	N/A
035	Text	T0015	N/A	N/A	N/A
036	Numeric Entry	NE0003	I/Obr_ImpostaVelNastro	N/A	N/A
037	Text	T0016	N/A	N/A	N/A

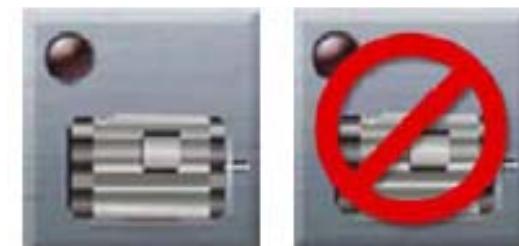
# 简便的多语言文本编辑

- 文本数据库中含有多种代码支持多语言应用，且可导入/导出，可使用**Microsoft Excel**来编辑代码并导入到应用程序当中。

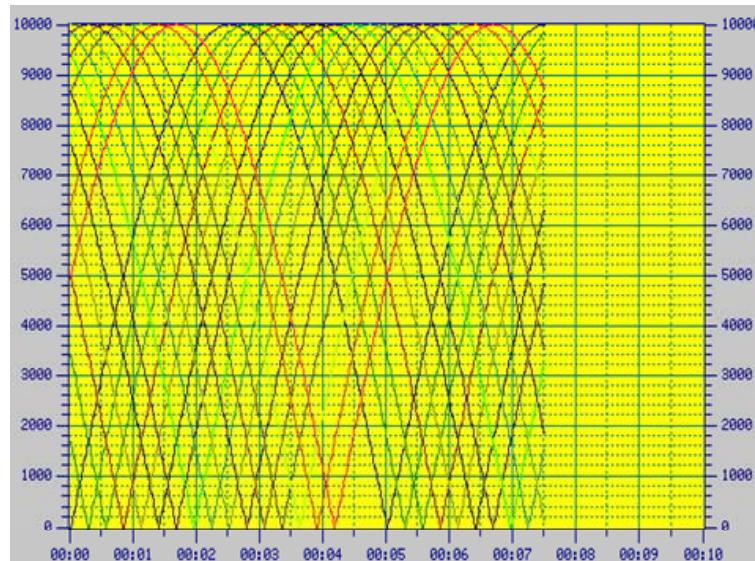
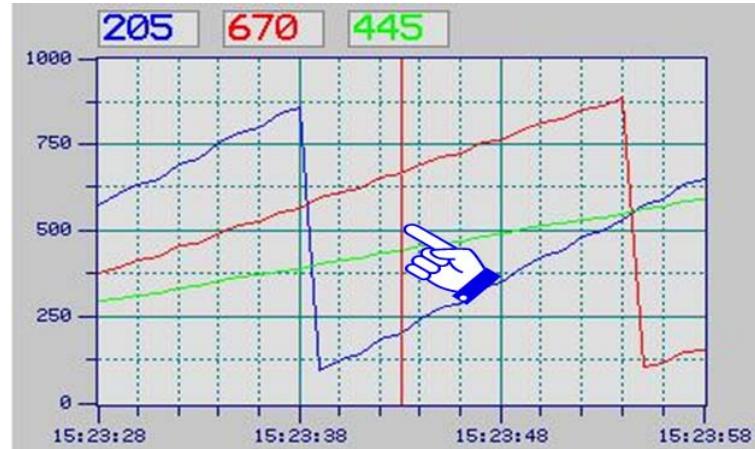
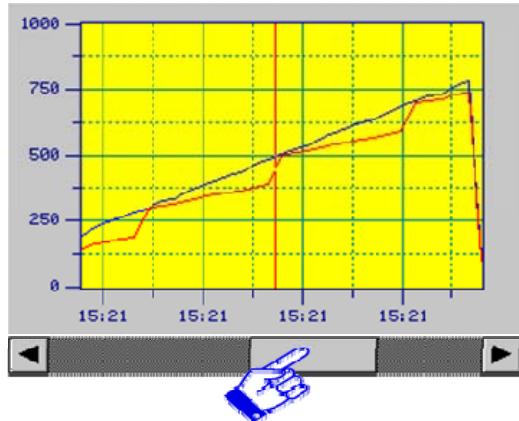


# 知识产权保护与防盗版功能

- 您可以针对文档、主宏和密码表等文件类型，分别设置不同的密码保护，可预先设置禁止复制或上载某程序等操作。
- 可进行输入权限设置；根据操作权限的不同，可将功能键/开关/数据输入对象进行允许/禁止操作的设置，或在操作权限不足时，功能将被直接隐藏
- 在进行数据输入前，需要对操作者的权限进行确认。



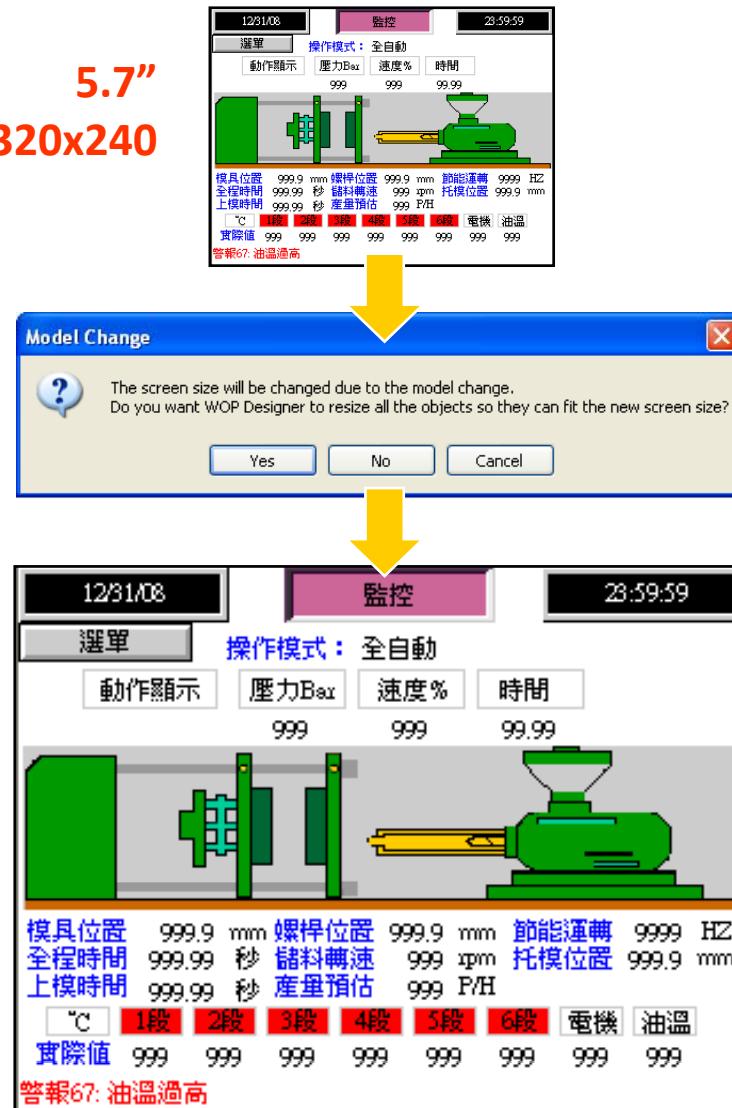
- 一个历史趋势图取样曲线最多可以设定16条曲线。
- 历史趋势图、曲线图、XY曲线图皆支持参考移动坐标轴线，方便查看该点之曲线数据值。



- **Changing HMI Model Can Be Done in Seconds**
- **Up to 7999 screens**
- **1 Startup macro, 1 Main macro, up to 4 Event macros, up to 4 Time macros, no limitation on other kinds of macros**
- **Built-in touch keypads or custom touch keypads**



5.7''  
320x240





- 图形对象支持多国语言，应用上可轻松进行对象多国语言显示。



# 多种警报和监控展示

- 16种离散警报和16种模拟量警报， 提供多种监控和记录方式。
- 通过警报记录， 可以获得对8组数据的监控和记录信息。
- 自动全局警报， 可将警报信息随时显示于当前屏幕上。

Operation Log Display Demo		
Date	Time	Message
31/08/09	16:56:53	Scrolled the slide switch (637)
31/08/09	16:56:49	Inputted a new value (896.7)
31/08/09	16:56:33	Button is clicked. (OFF)
31/08/09	16:56:32	Scrolled the slide switch (318)
31/08/09	16:56:29	Inputted a new value (5.0)
31/08/09	16:56:25	Button is clicked. (ON)
31/08/09	16:56:19	Cleared the operation history

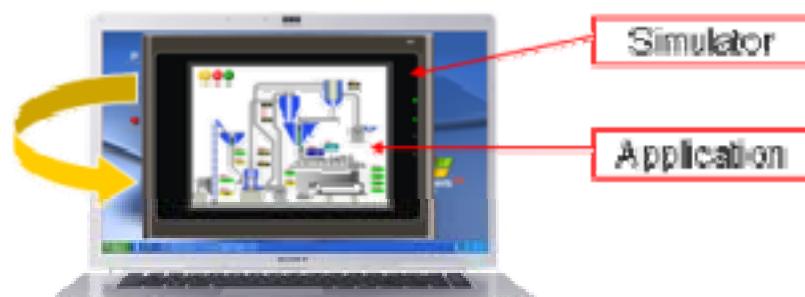
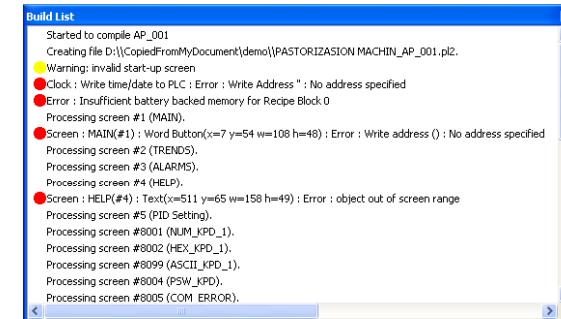
Button    896.7    - +    Clear



# 便利的除错与仿真功能

- Verify the correctness of all the settings and designs
- Optimize the communications with the connected controllers
- Interpret macros into compact and ready-to-execute codes
- Build the panel runtime data to be executed by the HMI engine of the WOP Runtime.
- **Jump to the program line by Click Fault message directly**

- **Convenient tool for design verification**
  - Offline simulation
  - Online simulation



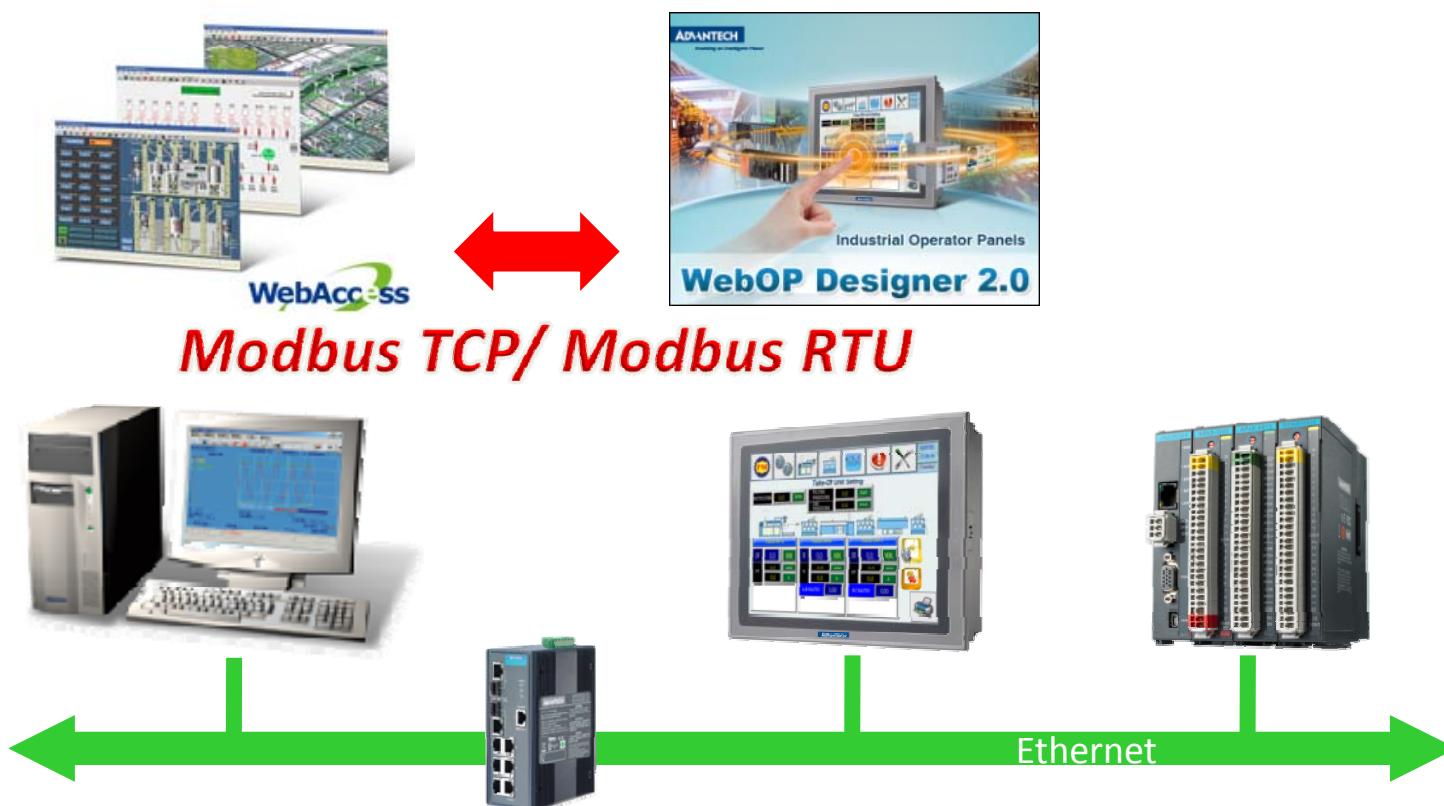
Offline simulation



Online simulation

# 可与大型组态软件无缝连接

- Controller data sharing and transfer between WebAccess and WebOP Designer through Modbus TCP protocol.



# WebOP 官方网站 <http://www.advantech.com/WebOP/>

**Promotion Flash Banner**  
Showing the latest technologies and services with the wheel broadcasts

**Tutorial Videos**  
Introduce the features of software and how to complete a project

**Product Information, News, Quickly Archive**  
Get the latest News, eDM/newsletter, DS, manuals

热线电话 800-810-0345  
<http://www.advantech.com/WebOP/>

# WebOP培訓課程

- 培训地点：研华（北京）培训中心
- 网址：<http://training.advantech.com.cn/>

The screenshot shows the homepage of the Advantech Training Center. At the top, there's a banner with three people in business attire. Below it, the text "研华培训中心" (Advantech Training Center) is displayed next to a globe icon. On the left, there's a sidebar with links for "课程首页", "关于训练课程", "课程总监", "本月课程", and "各区上课地点". A yellow box highlights "多项多样的产品培训" and "多项实用的实训工具". In the center, there's a section for "近期培训课程" (Upcoming Training Courses) with two entries:

课程名称	开课地点/日期	时数	原价	线上报名
WebAccess组态软件高级开发	北京 4/27/2011	3天	2800	<a href="#">立即报名</a>
工业控制计算机PC维修	昆山 5/13/2011	1天	900	<a href="#">立即报名</a>

At the bottom, there are sections for "最新消息", "活动资讯", and "焦点议题".



*Enabling an Intelligent Planet*

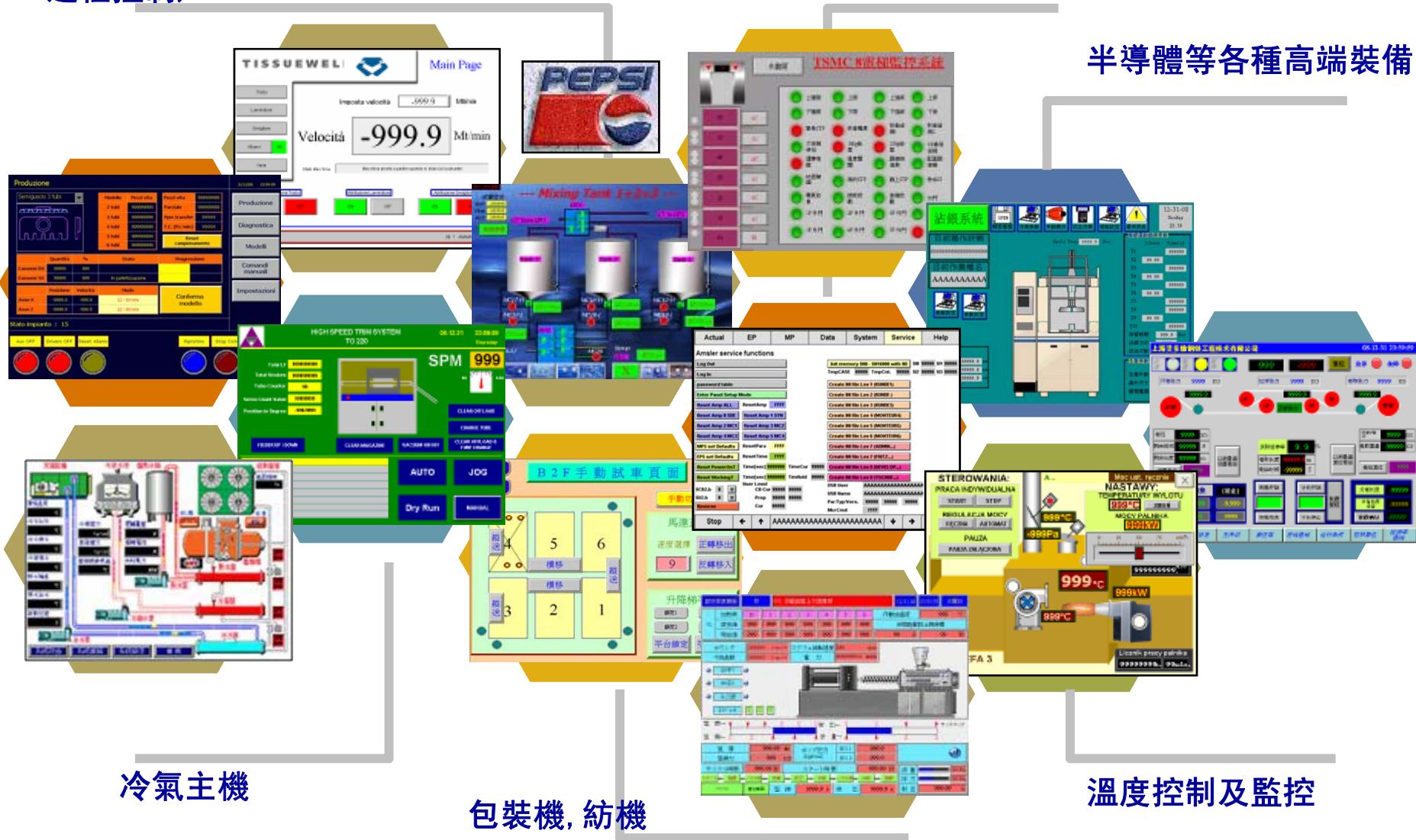
**ADVANTECH**

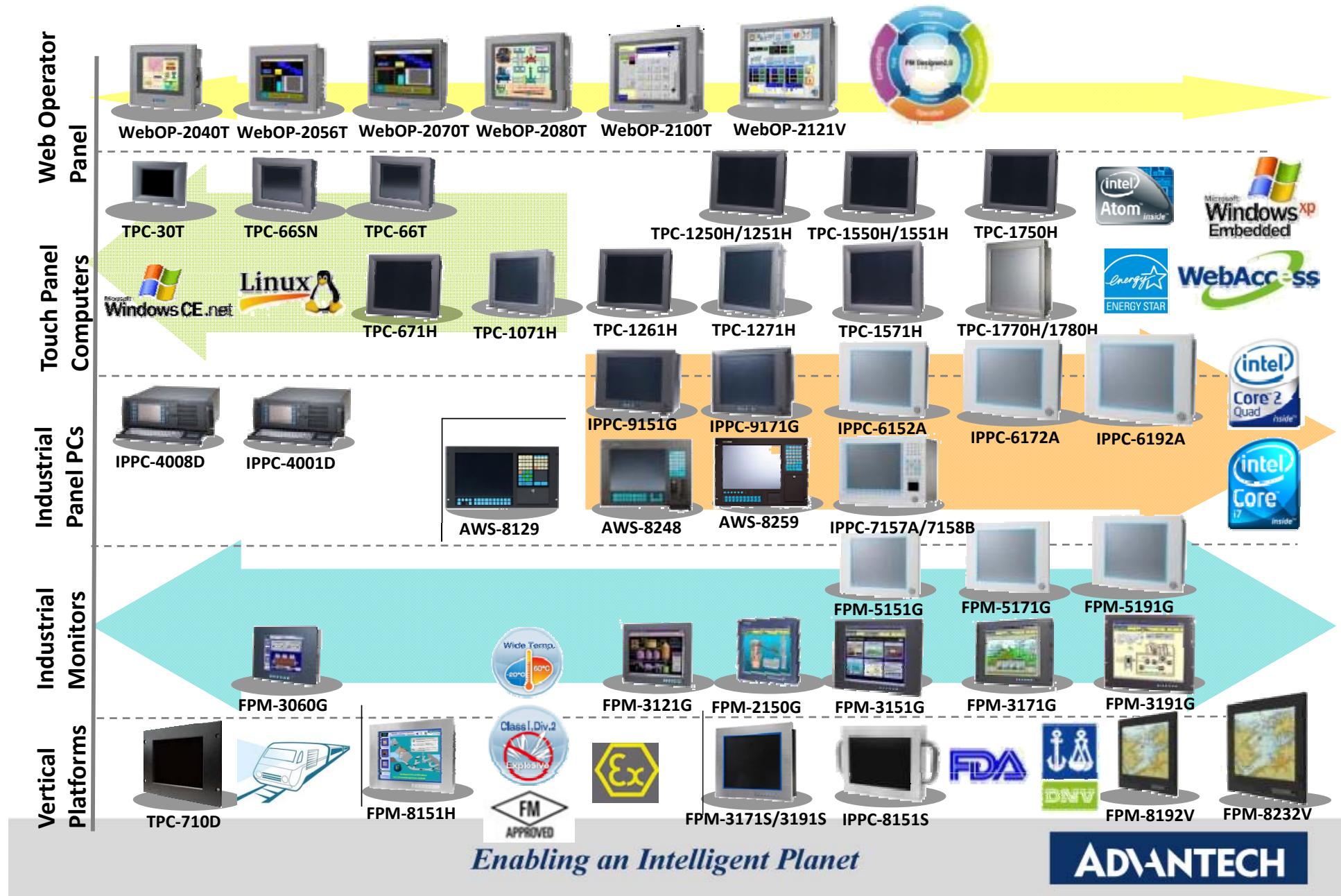
# 超過百種的成功應用案例

過程控制)

電梯系統

半導體等各種高端裝備





# 智能地球的推手



*Trusted ePlatform Services*

**ADVANTECH**

*Enabling an Intelligent Planet*

**ADVANTECH**