# TPC-5000 Series Sales Kit



iAutomation Systems & Solutions
Automation Panel

### **Modularization Become The Trend**

- ✓ Comprehensive demand from different customer
- √ Faster and saving design time

✓ Easy maintain and upgrade













### Why Modularise Your TPC?



### **Flexibility**

Three selectable box modules (Thin-client/Control Panel/Monitor) for different requirements.

### **Easy Maintenance**

Maintaining the system simply removing the computing box. No need to unmount the whole unit from cabinet. And simply send out the defect module for repair.

### **Quick Customization**

Touch designed to fast adapt to different logo requirements. Panel and box are in individual modules, faster to customize either one and adapt it to standard module.

### **Upgradable**

Easy and economical replacement. Only need to upgrade computing boxes when technology advances.



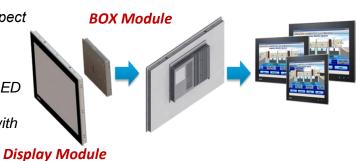
### **Industry 4.0 Modular Panel Platform**

### **Display Module**





- 5.7 ~ 21.5" size with 4:3 & 16:9 aspect ratio
- Front IP66, True flat, P-Cap Muti-Touch
- Customized Logo, touch sensor, LED and iKEY capabilities
- Interactive WiFi. Bluetooth. NFC with Antenna Design
- Easy installation clip Design
- Fast customized Box design



### **Box Module**

### **Control Panel**







#### Control BOX Module

- Optimized & Rugged Performance Housing Design
- Latest generation of Intel® Core™ i processor
- iDOOR & PCIe expansion & Removable SSD. M.2 & Antenna Design
- TPM, MRAM, 3x GbE, isolation power design for control software compatibility usage
- Panel Mount Supported
- **Machine and Cabinet**

### **Indu. Web Terminal & Monitor**





#### Terminal BOX Module

- Compact / Slim / Modular Design
- Slide in iDOOR+ Module in BOX
- Low power RISC-Based web browser terminal
- Selectable iDOOR smart i/o and communication module
- Selectable multiple Video interface with Picture-in-Picture (PiP) functionality
- iLINK Long distance (1to1 / 1to4)
- VESA supported

### Intelligent data acquisition

### **Indu. Thin Client**



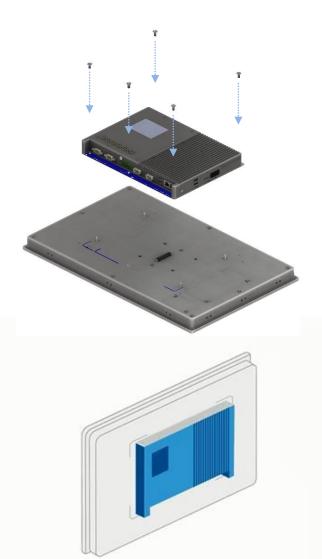
#### Thin-Client BOX Module

- Compact / Slim / Universal Design
- Latest generation of Intel® ATOM™ Processor
- Selectable iDOOR communication module and Removable M.2 storage
- Industrial Wide temperature capability
- PXE boot ready
- Assets management enabled by WISE PaaS/RMM
- VESA supported
  - **Process Visualization**



### **Click and Go!**



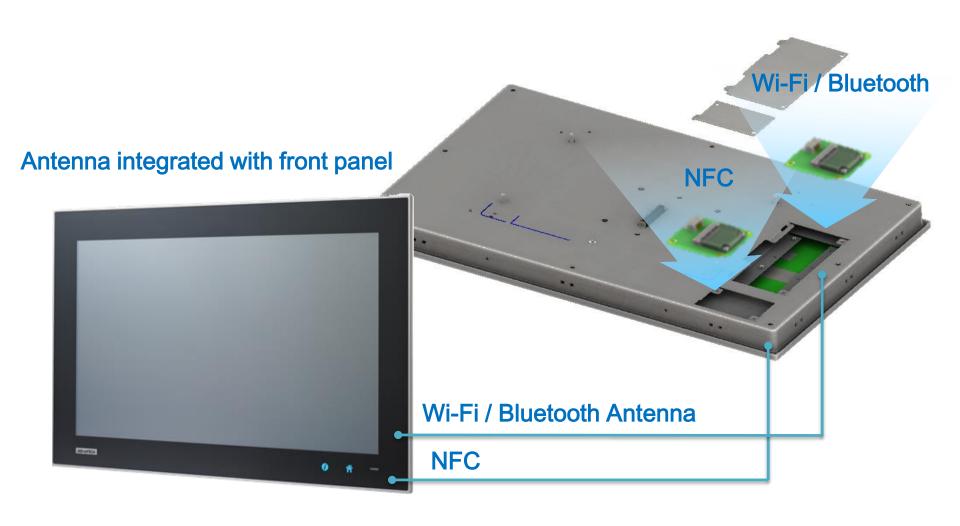


Easy switch box by 5 x screws



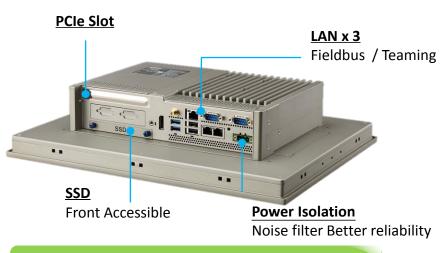
**Innovative Display Module** Logo iKey for on/off touch customization Home key for application switch (customizable) Wi-Fi Antenna on **Optional NFC Reader Front Bezel** NFC

### Fully integrated WiFi/Bluetooth/NFC



### Features of TPC-5000 & TPC-2000

### **Control Panel –TPC-5000**





### 3 x GbE

2 for OT and 1 for IT, support Multi protocol communication



#### **TPM 2.0**

Support TPM 2.0 Security Module to build more secure devices on both Windows and Linux



### **Isolated Power**

Protect connection devices in a most safest way



### IEC 61010-2 and IEC61131-2 compliance

Rugged design to fulfill HMI Control functionality

### **Thin Client – TPC-2000**



#### **Easy expansion cover**

User friendly and better reliability

#### **Display Port**

Extend image with lockable and Daisy Chain

**Audio out** 

COM port \*2

Communications

### **Expansion**

- SSD/HDD
- M.2
- mPCIE



### **TPC-5000 Key Feature Highlight**

Industrial 4.0 change the behavior

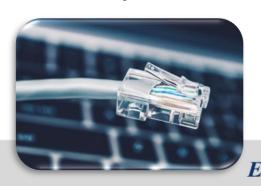
Few field devices are connected with each other

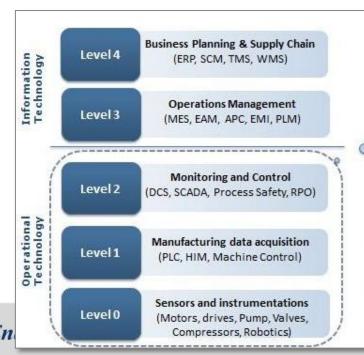
past

We are talking OT to IT

Today

- TPC-5000 with 3\*GbE
  - Connect more fieldbus
  - 2 for OT layer, 1 for IT
  - Teaming support for redundancy





#### Vision of Industry 4.0 and Smart Manufacturing

Cloud Storage and BigData Analytics

- Service applications like manufacturing planning, scheduling, operations and maintenance will automatically subscribe to the necessary data in real-time through cloud storage.
- Leading to Technology Convergence: Enterprise software, Automation, IT Software and service provider, and instrumentation
- Emerging Business Model: Platform as a Service, Product as a Service, Everything as a Service
- Truly distributed intelligence enabled by Cyber Physical Systems (CPS)

### TPC-5000 Key Feature Highlight (cont.)

Industrial IoT change the behavior

Few field devices are connected with each other

We are talking machine connected

Past

Today

- TPC-5000 built-in TPM 2.0
  - Secure your data from threat
  - Don't talk about IoT w/o any security protection





**Automation Panel Product Fleet** 







### Thin Client TPC-2000 Series

- Entry Panel for Automation Distributed Control System
- •Cost Effective solution with Simplify I/O
- Compact design with
   Low power consumption
- Web browser oriented application

### Control Panel TPC-5000 Series

- High PerformanceControl unit forAutomation Controller
- •Robust Design with high reliability Standard
- Field bus and communication by iDoor supported

### Domain Focus TPC-8000 Series

- •EN50155 Locomotive Transportation HMI
- All around IP69K Food and Beverage HMI
- •Oil and Gas HMI with C1D2/ATEX certification

## Indus. Monitor FPM-7000/2000 Series

- Robust / Wide temp /
   Long LED Life Industrial
   Grade Monitor
- Cost Effective VGA/DVIInput Solution
- Versatile Module design to meet different application

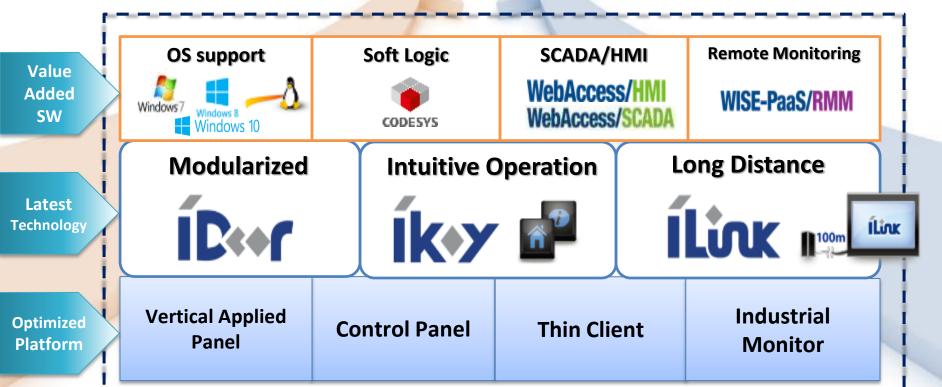


### **Automation Panel Development Path**

### **IIoT Applications**



**Application-Ready Packages** 



### **WISE-PaaS Remote Monitoring Management**



### WISE-PaaS/RMM

Remote device monitoring and data management to build IoT applications with rich RESTful APIs

### System Monitoring



### **Device Monitoring**

Device temperature, internet connection, CPU temperature, fan speed and voltage.



#### Automatic Alerts by Email/SMS

Administrators can get prompt notifications sent to their email inboxes or cell phones.

### **Remote Control**



#### Remote KVM

Quick access to remotely located, embedded devices for device diagnostics and repair.



#### Power On/Off

Sets the power on /off schedule for remotely located devices.

### Embedded Security



#### System Recovery

- · Hot Backup
- · Scheduled Backup
- · One-Click Recovery

Powered by





#### System Protection

- · White List Protection
- Warnings of any unauthorized activities

Powered by







Advance Features of WISE-Pass/RMM3.1

Professional version

## Server Scale System

Up to 1000

IoT devices connections and 3-layer hierarchical server design

## RESTful API Web Service

100+

RESTful APIs for crossapplication integration

## Information Extraction

- Data Acquisition
- Data Storage
- Data Visualization

### Service Availability

Up to 2
redundant servers
to ensure service
continuity

### **WebAccess – IoT Application Software Platform**



**Predictive Maintenance** 



**Big Data Analysis** 



Machine Learning



**Business Intelligent** 









WebAcc ss







### **External Alliance for I-IoT Applications**

















WebAccess/CNC



WebAccess/SCADA

WebAccess/HMI

WebAccess/NMS

WebAccess/IVS

WebAccess/IMM

WISE-PaaS/RMM

**WISE-PaaS/Security** 





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### **Production & Machine Data Acquisition**

Industry Protocols









Software







Sensors

**PLC** 



Robot



Controllers





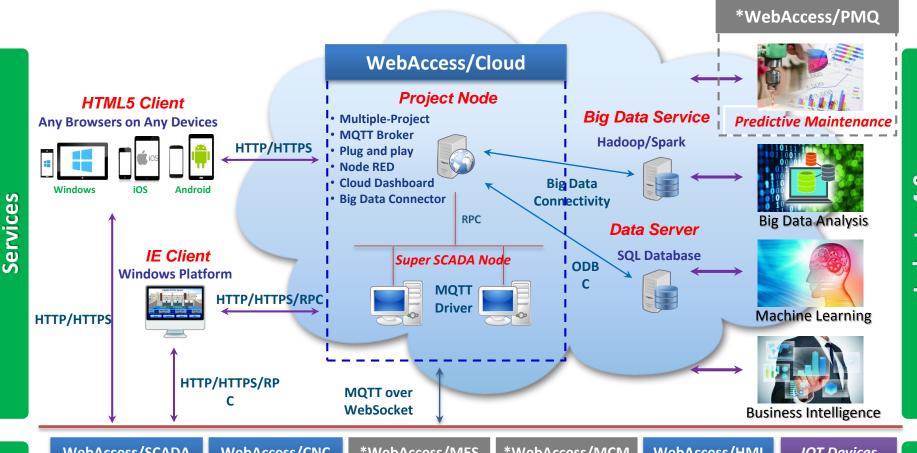








### Round Out the Device-to-Cloud IoT Applications





**Projects** 













### **Control Panel Roadmap**

### **TPC-1881WP**

- Ik\*Y
- 18.5" TFT HD LED LCD
- Intel 4th Core i3/i7 with 4GB DDR3
- Multi-touch PCT and IP66 true flat
- MiniPCle Slot (iDoor support)



16:9 Wide Screen

#### **TPC-1581WP**



- 15.6" TFT HD LED LCD
- Intel 4th Core i3 with 4GB DDR3
- Multi-touch PCT and IP66 true flat
- MiniPCle Slot (iDoor support)



- 21.5" TFT FHD LCD, multi-touch **PCAP**
- Intel 6th Core i3, 8GB DDR4
- True flat touch, IP66
- Rich I/O & PCIe and mPCIe Slot
- TPM / 3x GbE / MRAM option
- **Isolation Power design**
- iDoor support
- Interactive WiFi, Bluetooth, NFC with Antenna Design
- **Modular Design**

Q1,2017



**Available** 

**Developing** 

#### **TPC-5182W**



**Planning** 

- 18.5" TFT FHD LCD, multi-touch PCAP
- Intel 6th Core i3, 8GB DDR4
- True flat touch, IP66
- Rich I/O & PCIe and mPCIe Slot
- TPM / 3x GbE / MRAM option
- **Isolation Power design**
- iDoor support
- Interactive WiFi, Bluetooth, NFC with **Antenna Design**
- **Modular Design**

Q3,2017

#### TPC-15/TPC-1782H 📭 🧳

- 15"/17" TFT XGA/SXGA LED LCD
- Intel 4th Core i3/i7, 4GB DDR3 Rich I/O & PCIe and mPCIe Slot
- iDoor support



Regular Screen

#### **TPC-1282T**



- 12.1" TFT XGA LED LCD
- Intel 5th Core i3, 4GB DDR3
- Rich I/O & PCIe and mPCIe Slot
- iDoor support



#### **TPC-5152T**



- 17" TFT SXGA LED LCD, multi-touch
- Intel 6th Core i3. 8GB DDR4
- True flat touch, IP66
- Rich I/O & PCIe and mPCIe Slot
- TPM / 3x GbE / MRAM option
- **Isolation Power design**
- iDoor support
- Interactive WiFi, Bluetooth, NFC with Antenna Design
- IEC-61010 2 compliant
- Modular Design



#### **TPC-5172T**



- Intel 6th Core i3, 8GB DDR4
- True flat touch, IP66
- Rich I/O & PCIe and mPCIe Slot
- TPM / 3x GbE / MRAM option
- **Isolation Power design**
- iDoor support
- Interactive WiFi, Bluetooth, NFC with **Antenna Design**
- IEC-61010 -2 compliant

**Modular Design** 



Q1,2017

Q1,2017

2016 Released

2017 1H

2017 2H



Enabling an Intelligent Planet

### **Partnering for Smart City & IoT Solutions**

驅動智慧城市創新 共建物聯產業典範



Transportation

**IoT Devices** 

**Computer On Modules** 

**Video and RFID** 

Power & Energy

**Environmental & Facility Monitoring** 

**Embedded Software** 

iBuilding/BEMS

Industrial HMI

**Embedded Design-in Services** 

Intelligent Display

Intelligent Systems

iRetail & Hospitality

iHospital

**Image & Video Processing** 

**Machine Automation** 

WebAccess+

**Digital Healthcare** 

**Digital Logistics** 

Industrial PCs