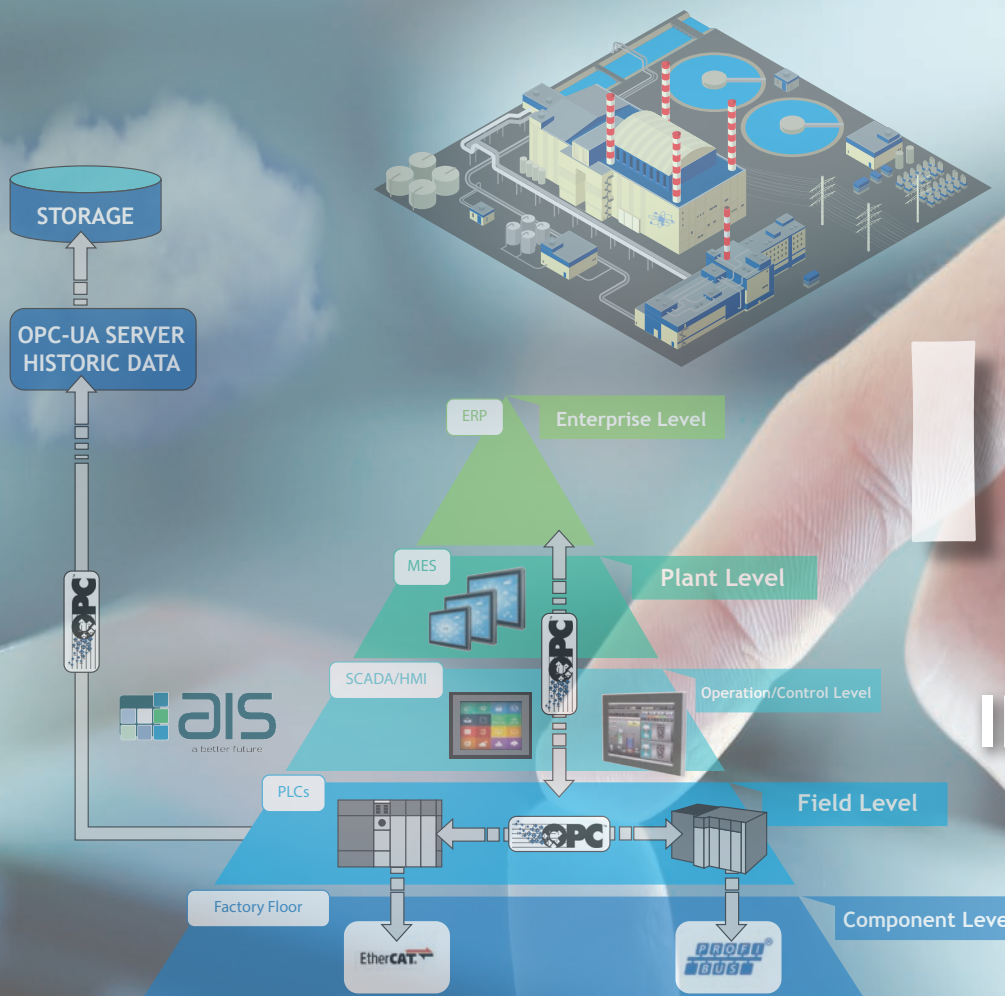


# AIS OPEN PLATFORM, PC-BASED SERIES

# HMI SOLUTIONS



# IIoT

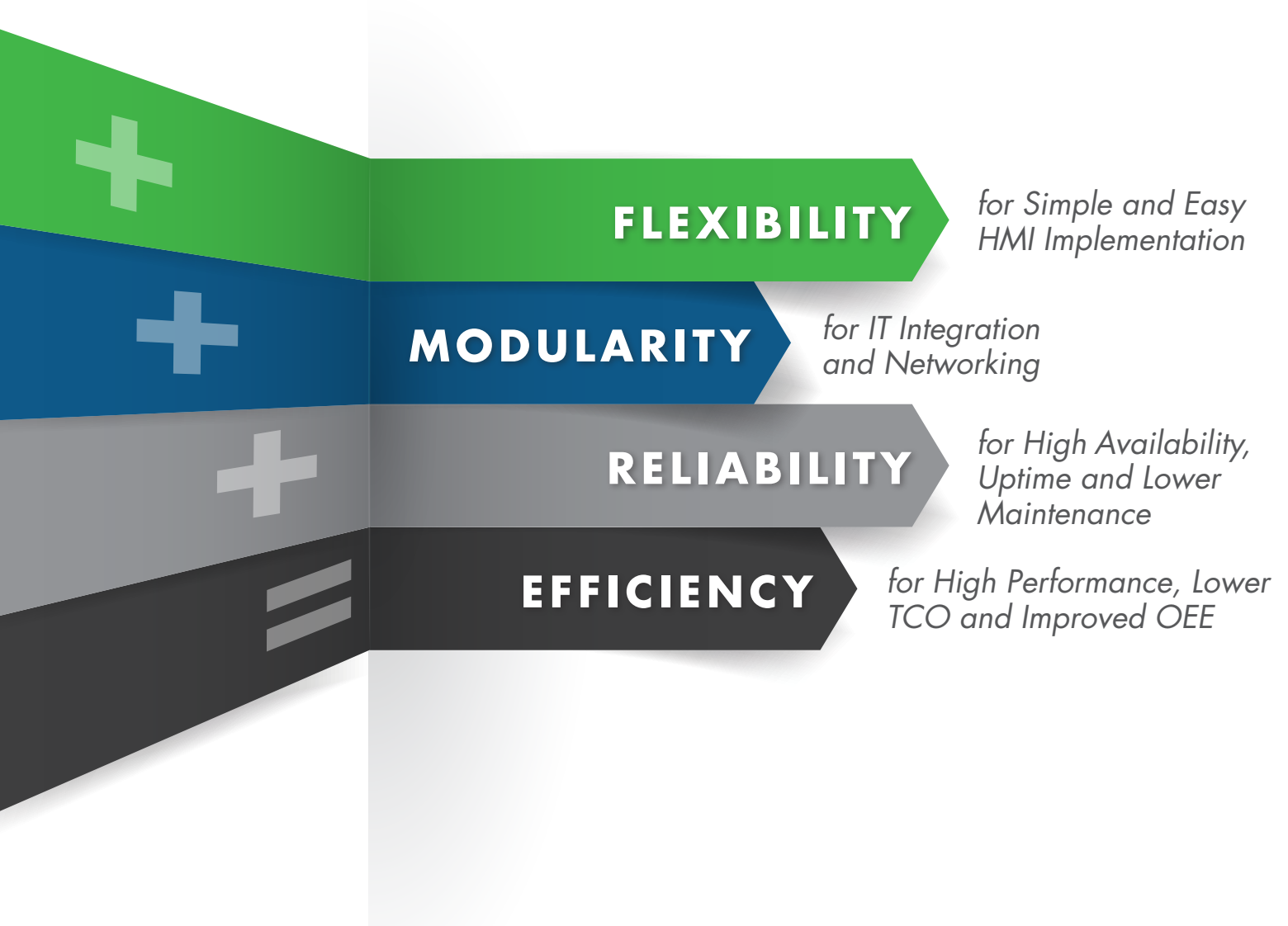
## INDUSTRY 4.0

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# Best-in-Class, Open HMI Touch Panels from Industrial Displays to Embedded PCs and Mobile Tablets

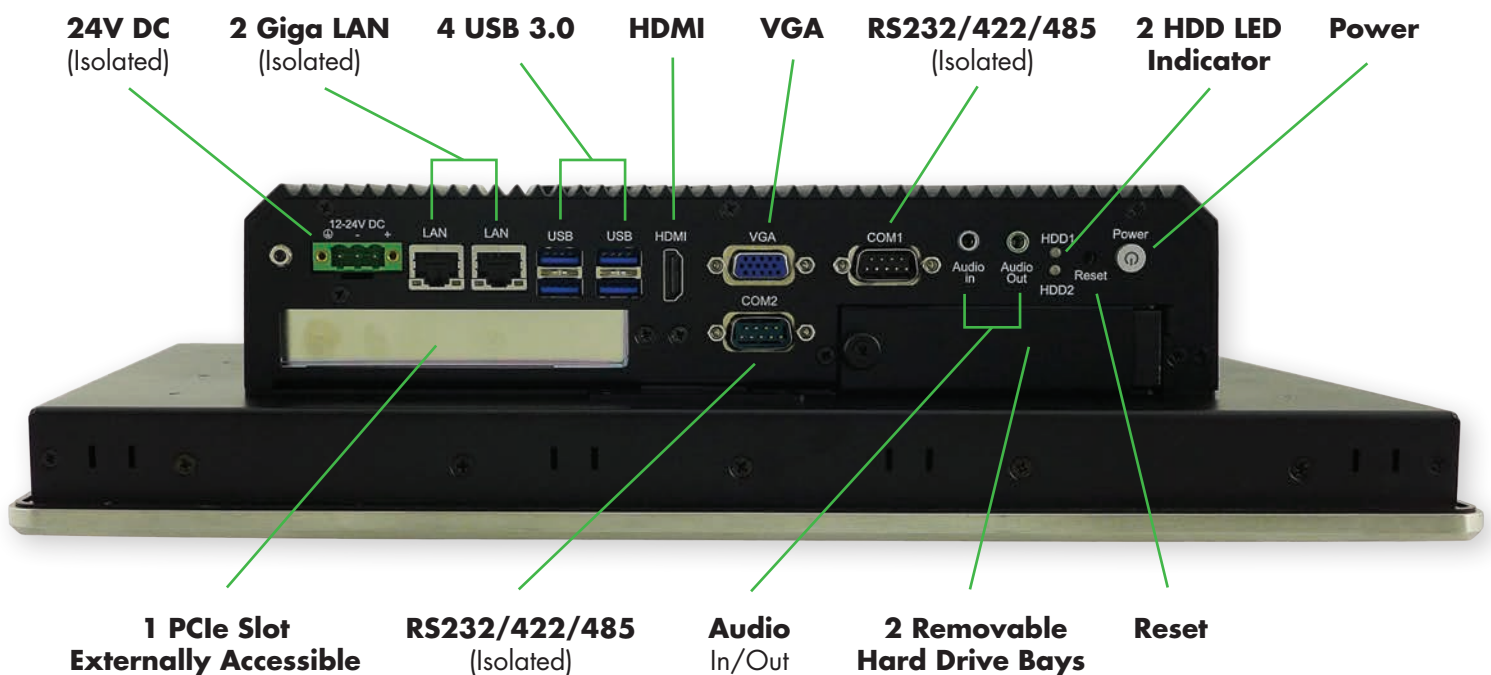
*Introducing a new family of HMI Operator Panels so extensive that almost every conceivable need is met...from simple and basic machines to automation systems with the most demanding MES, SCADA, ERP and networking requirements imaginable.*



## Introducing Our Complete Line-Up of Industrial HMI Touch Panel Solutions...

### AIS Offers Common Architecture, Functionality & Build Quality Across All Display Sizes

*Functionality is identical throughout the entire range of AIS's new family of HMI solutions. Engineering intelligent HMIs with a common design architecture and functionality delivers many advantages. Since AIS HMI Touch Panels are scalable systems, you can expand them any time as required by changing the displays or the computing power of the PC engine. AIS's innovative HMI Operator Panels open up completely new possibilities for intuitive visualization.*



# Family Overview

## Premium HMI Touch Panels

Our most advanced, modular HMI series with superior processing capabilities to meet any SCADA, MES, ERP, networking or OEM application. Available in 15" to 24" screens sizes.

## Standard HMI Touch Panels

Power and functionality in a modular package covering the greatest range of industry requirements from medium-to-high-end SCADA, MES and OEM applications. Available in 12" to 24" models.

## Compact HMI Touch Panels

Our lowest cost solution offering the greatest value, feature set and capabilities for simple machine level HMI applications. Available in 7" to 22" models.

## Comfort HMI Touch Panels

Slim, stylish and intuitive HMIs for applications requiring Power Over Ethernet (PoE) control and monitoring solutions. Available in 7" to 22" models.

## Compact-Lite HMI Touch Panels

Featuring our smallest touch-panel screens available with features and functionality for machine level HMI applications. Available in 4" to 15" models.

## Mobile HMI Touch Panels

Smart HMIs for the ultimate mobile experience allowing operators and managers to achieve unprecedented levels of control, monitoring and diagnostics on-the-go.

## Hazardous Area HMI Touch Panels

Intrinsically safe, EX Certified HMIs for areas deemed hazardous and/or explosive environments. This series offers our most rugged, hardened and durable smart HMIs.

## OEM HMI Touch Panels

The flexible and proven design of AIS standard smart HMI products makes it possible to meet just about any technical requirement for custom hardware and software solutions.



## Adaptable to Meet Your HMI Needs Today, Tomorrow & in The Future

*AIS offers Industrial Monitors and Embedded PCs that enable operators to implement control and monitoring schemes with less risk, fewer challenges and effort.*

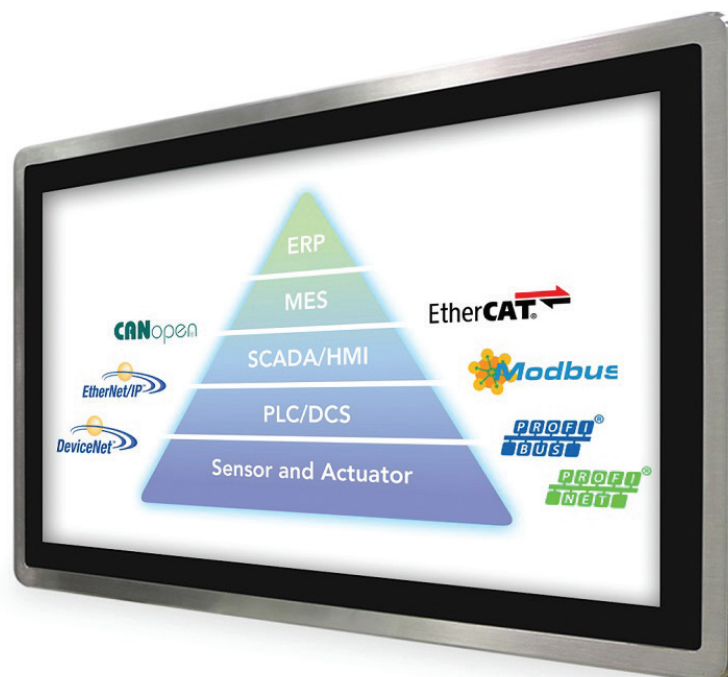
### Simple HMI/IT Integration & Convergence

Leverage existing factory and plant machinery, databases, control and SCADA systems with AIS's open, high-performing Industrial Panel PC embedded technology. AIS offers a PC-based, modular system for meeting the complex HMI, SCADA and MES demands and industry standards of today, along with the need for future expansion.

### Seamless Integration of Industrial Networks with a Choice of Network I/O Options

Real-time distributed control via industrial networking interfaces and communications are critical to connecting automation systems and components on the factory floor. As an open platform solution, AIS provides an extensive range of industrial, wireless, Ethernet and fieldbus devices for all common I/O and fieldbus systems which helps implement totally integrated networked automation systems.

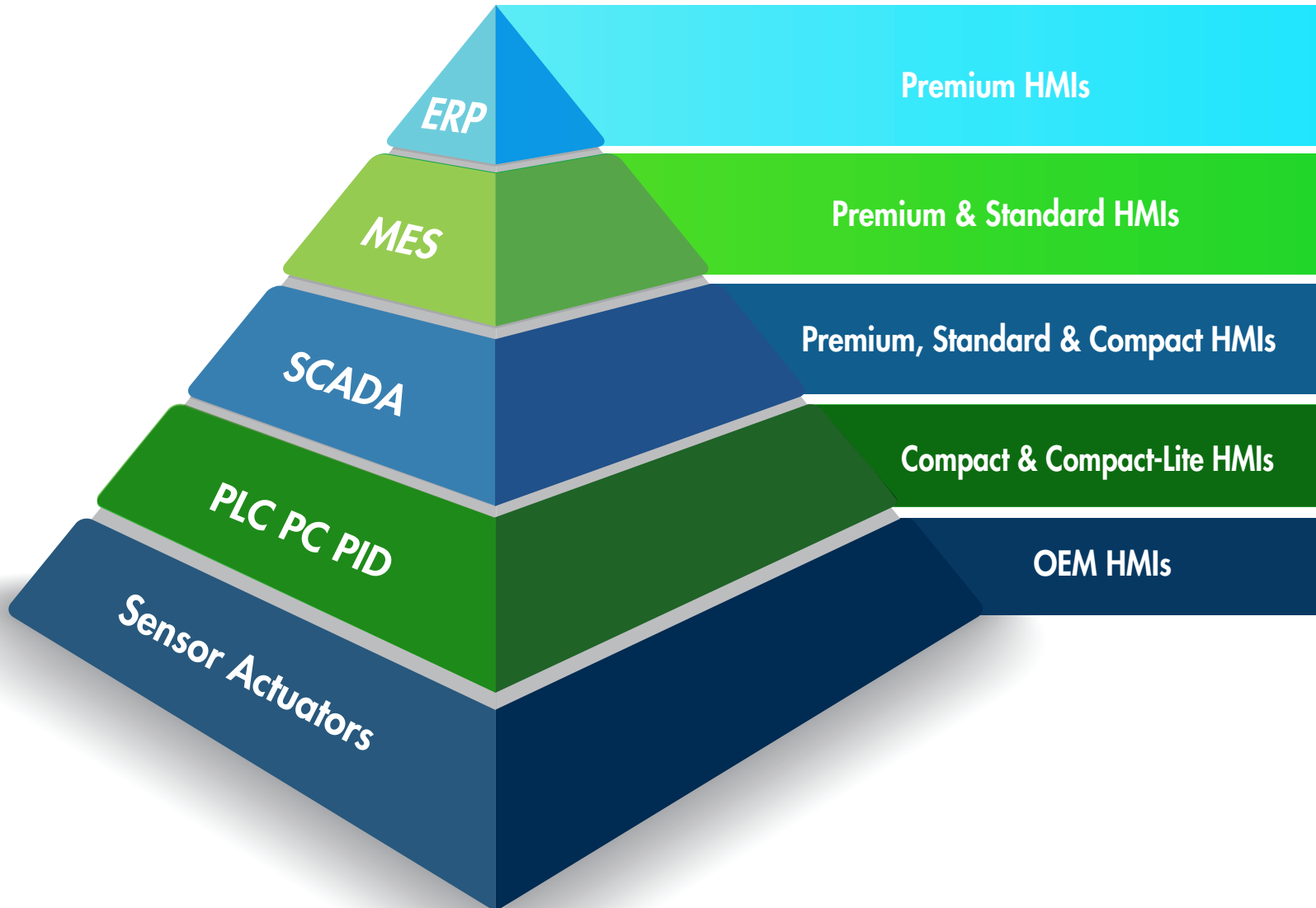
***AIS is dedicated to support Fieldbus and Real-Time Ethernet industrial networks.***





## Easy Integration with SCADA, MES and ERP Applications

AIS's Industrial Panel PC modular design allows your HMI/SCADA/MES system to grow and expand as your needs change. Efficient interaction between all automation components and intelligent control systems optimize processes which reduces total cost of ownership. AIS modular HMI Panels are easily configured with various display sizes, computing power, operating systems and third-party systems integration.



## Scalable, Complete and Simple for Fast Project Engineering

*Compact, ruggedized and nearly maintenance-free, AIS Embedded Panel IPCs and industrial Box PCs can be expanded via a wide range of hardware and software options.*

## Future Proof HMI Investments with an Easy Migration Path

Proprietary systems and upgrade costs take their toll on bottom line profits. AIS open HMIs eliminate the risks associated with “predicting the future” by providing flexible and upgradeable solutions to comply with emerging requirements for smart manufacturing and buildings. AIS PC-based HMIs offer standard file formats, standard interfaces and communications with improved data handling.

## Meeting Global Compliances, Certifications & Standards for Safety and Peace of Mind

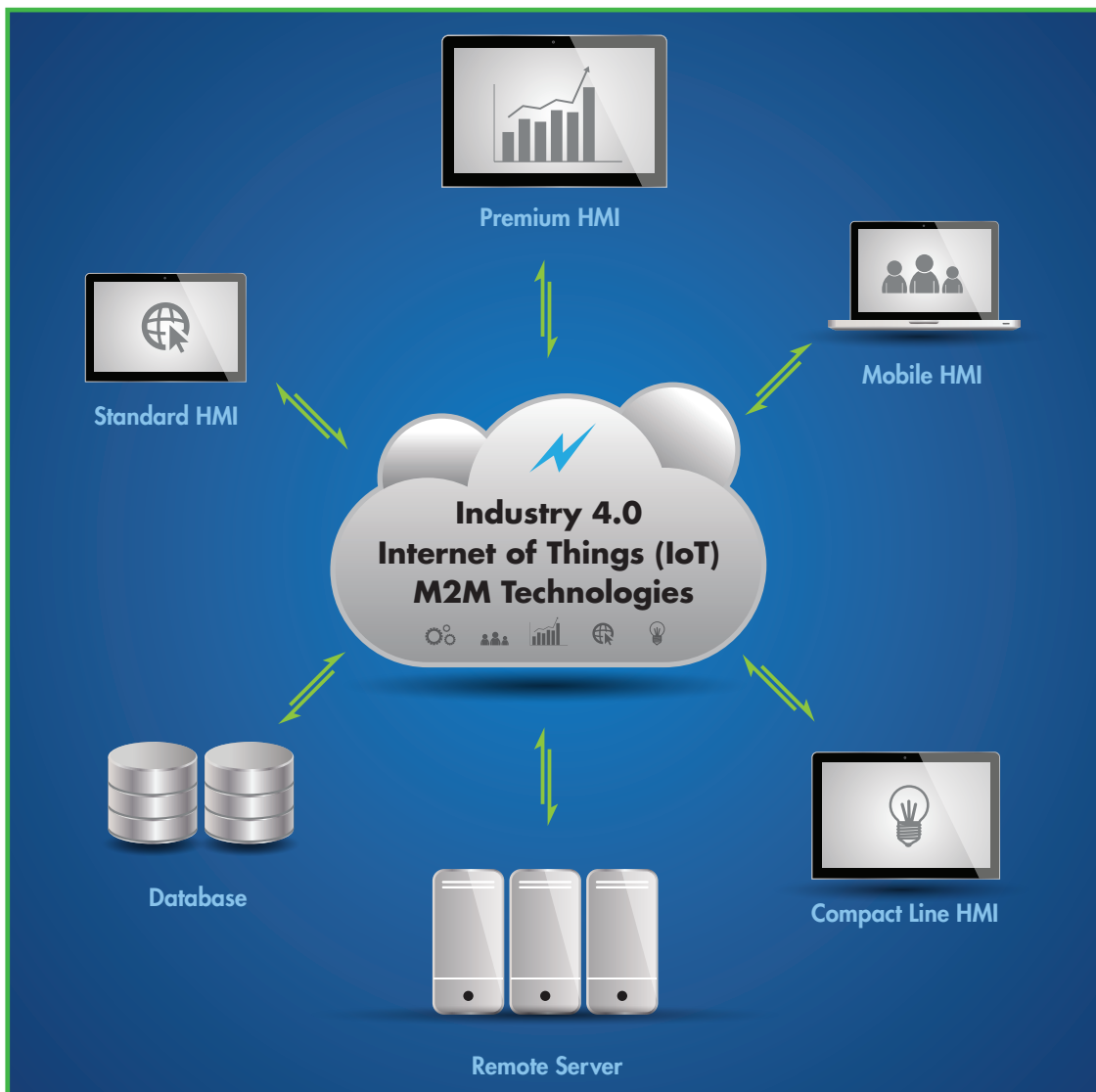
AIS’s open platform HMIs and industrial touch-panel development and engineering teams focus on meeting changing standards, certifications & compliance requirements.





## Accelerating Opportunities in Industry 4.0 Technologies, M2M & Internet of Things (IoT)

The Internet of Things (IoT) allows connectivity to an expansive range and network of new intelligent devices and sensors. New M2M and Industry 4.0 technologies are driving automation productivity in factories and buildings beyond the confines of traditional wired facilities. Embracing these new technologies, AIS Mobile HMIs are portable, hand-held mobile devices for data collection in the field. They are designed to help users capitalize on their “on-the-go” computing requirements.



## Highly Reliable & Available HMI Systems Improve the Bottom Line

*AIS provides unparalleled lifecycle support for our extensive installed base, including a broad range of software and hardware upgrade products designed to extend life and improve reliability. An open architecture combined with redundant storage and integrated networked devices, produce highly available and reliable HMI systems.*

## Field Replaceable Modules for Easy Maintenance and Lower Service Costs

Downtime whether scheduled or unscheduled can be costly to an operation's productivity and efficiency. Returning an automation system back into service quickly is important to maintaining KPIs and production quotas. Maintenance and replacement of HMI system's main components are easy even for maintenance personnel with limited technical knowledge and experience.

### Customer Replaceable Units:

- CMOS battery
- Mass storage
- Random-access memory
- Power fuses
- PCI Add-on card



## Redundancy Concepts Ensure High System Availability & Security

Real-time processes require complete transparency and integration of all data sources, storage, network communications and existing systems. Redundancy storage with dual-channel-enabled memory controllers utilizing two 64-bit data channels, allows AIS's high availability HMI solutions to provide continuous control and monitoring.

*Featuring dual redundancy capabilities and open network platforms, AIS industrial panel PCs deliver real-time data processing.*



## Achieving Optimal Cost Efficiency, Performance & Output

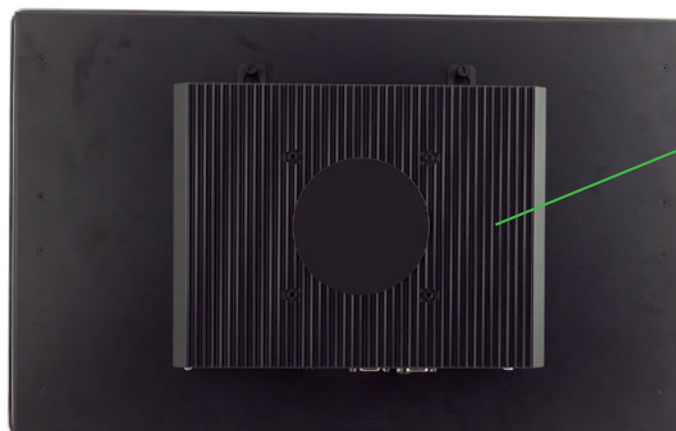
*The need for faster processing and greater connectivity along with a wider range of network and peripheral interfaces, will continue to drive the demand for smart HMIs. AIS open HMI solutions enable industrial operations to synchronize with business objectives to achieve speed, flexibility and sustained profitability.*

### Engineering Capabilities that Translate into Long Term Sustainability

For over two decades, AIS has been designing and engineering superior embedded computing solutions that achieve an optimal balance between standard, commercially available technologies and industry specific solutions for rugged environments.

### Lower TCO and Increase OEE, While Achieving Higher Performance

The Premium and Standard HMI series expands AIS's family of reliable multi-function touch HMI offering. We continually invest in new technologies resulting in new control and monitoring products. This enables our customers to reduce production costs, manage energy usage and make their facilities more efficient.



*Field replaceable Box PC for fast and easy service lowers overall system costs.*

## Squeezing Supply Chain Efficiency for More Profitability & Uptime

AIS modularized, open HMI systems are easily replaced by customers in the field, while maintaining high productivity with the least amount of downtime and disruption. But just as important, is the reduction of spare parts inventory in the supply chain, which equates to less capital invested, easier maintenance and higher availability and uptime.



*AIS's modular HMI design allows users to easily modify, change and upgrade their control systems in the field.*



## Customized, Smart HMI Solutions for Your Total Success & Satisfaction

*Starting with our successful and proven standard family of Panel and Box PCs as the basis of your custom design, we then create an HMI solution that is tailored precisely to your requirements. Our custom portfolio covers hardware, software, turnkey services, as well as support and logistics.*

### The Benefits of Using AIS as your Custom, Smart HMI Development Resource are Threefold.

- 1 Time & Cost Savings:** We have decades of experience, technology deployment and systems in place to develop a superior custom HMI solution quickly.
- 2 Higher Profitability:** Focusing your capital, time and resources on our core competencies will help you increase efficiency and productivity.
- 3 Increased Competitive Edge:** The more advanced and tuned your HMI solution is to the specific application, the more your machine will stand out for its superior performance and capabilities





## Customized, Smart HMI Solutions Overview

Customized HMI products are developed in various stages in accordance with our design for manufacturability, electrical, mechanical, testing and quality standards. After a customized solution passes our rigorous certification and standards testing, it proceeds into final production.

*The four key areas of our customized, smart HMI development program includes:*



## **Creative, Proven & Flexible Design Concepts to Meet Your Exact Smart HMI Requirements**

*Customer-specific designs are based on AIS's industry proven and standard HMIs. However, each design is unique to our customers' unique specifications. Our open platform design allows us to flexibly adapt our solutions to almost any situation. From individualized design through software installation and special tests, right up to final delivery, AIS is committed to making your project a complete success.*

### **A Wide Variety of Components are Combined to Create Your Individualized HMI Solution**

Your requirements may vary and be based on specific industry, environmental and/or custom application specifications. Our tailor-made HMI solution fits your exact requirements at an affordable price. Below are a list of customizable components and options for your AIS design by product class.

#### **Customized Premium, Standard, and Compact HMI Touch Panels**

- A variety of processors for customized performance
- A variety of memory media and capacities
- Display and touch screen technologies, sizes and resolutions
- Additional modules or interfaces, complete with the necessary device drivers
- Selectable Windows® operating systems
- Preinstalled customized software packages
- Front-plate design in color and labeling of the interfaces
- Additional functions with the PCIe slot

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## Quotation Preparation Process & Quantity Assessment Stage

AIS's Smart HMI development specialists prepare and draft quotes based on product specifications. The quotes are in accordance with customer needs, specifications and quantity requirements. A minimum of 100 per version purchase quantity annually is required.

- One-time project costs
- Costs for sample devices/prototypes
- Standard unit prices
- General conditions (product agreement)

## Product Agreements Ensure Clarity and a Mutually Beneficial Relationship

Customized products can only be ordered in conjunction with a product agreement. This is beneficial to both parties to have a clear understanding of all deliverables, goals and terms. The product agreement covers all possible terms and considerations including, repairs and necessary customized spare parts for future service. The following points are also defined in the product agreement:

- Customer-specific order number is allocated during the product agreement process
- Delivery and pricing
- Logistics - annual volume, purchase quantity, delivery batch volumes
- Spare parts service
- Repairs/spare parts storage

---

**PROVEN +  
FLEXIBLE +  
CUSTOMIZABLE =  
TOTAL PROJECT SUCCESS**

## Premium HMI Touch Panels (4:3)

Part Number			
	HMI-TPND0U-15SR-X00H	HMI-TPND0U-17SR-X00H	HMI-TPND0U-19SR-X00H
Display			
Size in inches / resolution in pixels	15" / XGA, 1024 x 768	17" / SXGA, 1280 x 1024	19" / SXGA, 1280 x 1024
Brightness / luminance	400 nits / 400 cd/m <sup>2</sup>	350 nits / 350 cd/m <sup>2</sup>	350 nits / 350 cd/m <sup>2</sup>
MTBF of backlight	LED-backlight up to 100,000 hours in Eco mode		
Touchscreen	Single-touch (resistive analog)		
System Hardware			
Processor	Intel® Core™ i7-4650U Processor; 4M Cache up to 3.30 GHz, 15 W maximum TDP		
Cores / speed	2 / 1.7 GHz		
Memory / # of slots	From 8 GB DDR3L 1600 SDRAM, configurable up to 16 GB / 2 slots		
Graphics / video	Intel HD graphics; DirectX 11.1, OpenCL / GL, and 4K videos Quick Sync encoder		
RAID	RAID 1 system with onboard RAID controller		
Drives			
Mass storage	1 x 180 GB SSD, configurable up to 2 x 180 GB SSD RAID1 preconfigured		
Secondary storage	32 GB m-SATA SSD		
Optical drives	Connection via USB port		
Interface Ports			
Ethernet	2 x Ethernet TCP/IP - RJ45		
USB	4 x USB 3.0		
Serial	COM1: RS-232/422/485; COM2: RS-232, isolated		
Graphics / video	1 x VGA; 1 x HDMI		
Audio	1 x Line-in, 1 x Line-out		
General Features			
Operating system	Windows Embedded 7 32 or 64-bit / Windows Embedded 8		
Free expansion slot	1 x PCIe (x4)		
Current supply	9 - 36 V DC, isolated		
Bezel / housing	Stainless steel / aluminum		
Mounting options	Panel PC: Panel / wall mount; Box PC: Wall / DIN rail mount		
Packages / bundles	Packages with Wonderware InTouch, ready-to-use HMI software (optional)		
Environmental / Ambient Conditions			
Degree of protection / thermal	Front: IP66; Rear: IP20 / Fanless		
Electromagnetic compatibility	CE, FCC A, EN 61000-6-4, EN 61000-6-3, CISPR22, RoHS		
Vibration during operation	Tested according to DIN IEC 60068-2-64: 5 - 500 Hz: 1 Grms		
Shock during operation	Tested according to DIN IEC 60068-2-27: 15 gn for 11 ms		
Ambient temperature	0...50°C (32...122°F)		
Relative humidity	30% to 95% at 40°C (no condensation)		
Certifications / regulations	UL/cUL/CB 62368, UL/cUL/CB 61010, IP66, NEMA 4/4X		
Physical Specifications			
Operator panel / cut-out (W x H)	387 x 291 mm	408 x 313 mm	420 x 358 mm
Installation dimensions (W x H x D)	397 x 311.5 x 94.6 mm	418 x 353.7 x 94.6 mm	451.6 x 377.7 x 94.6 mm
Product weight (kg / lb)	9.3 / 20.6	10.3 / 22.7	11.2 / 24.7
Warranty			
Period	12 months		

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# Premium HMI Touch Panels (16:9)

Part Number			
	HMI-TPNDOU-15SC-X00	HMI-TPNDOU-18SC-X00H	HMI-TPNDOU-22SR-X 0H
Display			
Size in inches / resolution in pixels	15.6" / FWXGA, 1366 x 768	18.5" / FWXGA, 1366 x 768	21.5" / HD, 1920 x 1080
Brightness / luminance	400 nits / 400 cd/m <sup>2</sup>	250 nits / 250 cd/m <sup>2</sup>	250 nits / 250 cd/m <sup>2</sup>
MTBF of backlight	LED-backlight up to 100,000 hours in Eco mode		
Touchscreen	Multi-touch (projected capacitive)		Single-touch (resistive analog) / Multi-touch (projected capacitive) optional
System Hardware			
Processor	Intel® Core™ i7-4650U Processor; 4M Cache up to 3.30 GHz, 15 W maximum TDP		
Cores / speed	2 / 1.7 GHz		
Memory / # of slots	From 8 GB DDR3L 1600 SDRAM, configurable up to 16 GB / 2 slots		
Graphics / video	Intel HD graphics; DirectX 11.1, OpenCL / GL, and 4K videos Quick Sync encoder		
RAID	RAID 1 system with onboard RAID controller		
Drives			
Mass storage	1 x 180 GB SSD, configurable up to 2 x 180 GB SSD RAID1 preconfigured		
Secondary storage	32 GB m-SATA SSD		
Optical drives	Connection via USB port		
Interface Ports			
Ethernet	2 x Ethernet TCP/IP - RJ45		
USB	4 x USB 3.0		
Serial	COM1: RS-232/422/485; COM2: RS-232, isolated		
Graphics / video	1 x VGA; 1 x HDMI		
Audio	1 x Line-in, 1 x Line-out		
General Features			
Operating system	Windows Embedded 7 32 or 64-bit / Windows Embedded 8		
Free expansion slot	1 x PCIe (x4)		
Current supply	9 - 36 V DC, isolated		
Bezel / housing	Stainless steel / aluminum		
Mounting options	Panel PC: Panel / wall mount; Box PC: Wall / DIN rail mount		
Packages / bundles	Packages with Wonderware InTouch, ready-to-use HMI software (optional)		
Environmental / Ambient Conditions			
Degree of protection / thermal	Front: IP66; Rear: IP20 / Fanless		
Electromagnetic compatibility	CE, FCC A, EN 61000-6-4, EN 61000-6-3, CISPR22, RoHS		
Vibration during operation	Tested according to DIN IEC 60068-2-64: 5 - 500 Hz: 1 Grms		
Shock during operation	Tested according to DIN IEC 60068-2-27: 15 gn for 11 ms		
Ambient temperature	0...50°C (32...122°F)		
Relative humidity	30% to 95% at 40°C (no condensation)		
Certifications / regulations	UL/cUL/CB 62368, UL/cUL/CB 61010, IP66, NEMA 4/4X		
Physical Specifications			
Operator panel / cut-out (W x H)	412.4 x 261.7 mm	479.3 x 300.3 mm	534 x 331 mm
Installation dimensions (W x H x D)	446 x 276.5 x 94.6 mm	495 x 316 x 94.6 mm	552.3 x 343.8 x 94.6 mm
Product weight (kg / lb)	9.7 / 21.4	10.9 / 24.1	12.2 / 26.8
Warranty			
Period	12 months		

## Standard HMI Touch Panels (4:3)

Part Number			
	HMI-TSND0U-12SR-X00H	HMI-TSND0U-15SR-X00H	HMI-TSND0U-17SR-X00
Display			
Size in inches / resolution in pixels	12.1" / XGA, 1024 x 768	15" / XGA, 1024 x 768	17" / SXGA, 1280 x 1024
Brightness / luminance	500 nits / 500 cd/m <sup>2</sup>	400 nits / 400 cd/m <sup>2</sup>	350 nits / 350 cd/m <sup>2</sup>
MTBF of backlight	LED-backlight up to 100,000 hours in Eco mode		
Touchscreen	Single-touch (resistive analog)		
System Hardware			
Processor	Intel® Atom™ E3845 Processor; 2M Cache, 1.91 GHz, 10 W maximum TDP		
Cores / speed	4 / 1.91 GHz		
Memory / # of slots	From 4 GB DDR3L 1333 SDRAM, configurable up to 8 GB / 2 slots		
Graphics / video	Intel HD graphics; DirectX 11.1, OpenCL / GL, and 4K videos Quick Sync encoder		
Drives			
Mass storage	1 x 180 GB SSD		
Secondary storage	32 GB m-SATA SSD		
Optical drives	Connection via USB port		
Interface Ports			
Ethernet	2 x Ethernet TCP/IP - RJ45		
USB	4 x USB 2.0		
Serial	COM1: RS-232/422/485, isolated		
Graphics / video	1 x VGA; 1 x HDMI		
Audio	1 x Line-in, 1 x Line-out		
General Features			
Operating system	Windows Embedded 7 32 or 64-bit / Windows Embedded 8		
Current supply	9 - 36 V DC, isolated		
Bezel / housing	Stainless steel / aluminum		
Mounting options	Panel PC: Panel / wall mount; Box PC: Wall / DIN rail mount		
Packages / bundles	Packages with Wonderware InTouch, ready-to-use HMI software (optional)		
Environmental / Ambient Conditions			
Degree of protection / thermal	Front: IP66; Rear: IP20 / Fanless		
Electromagnetic compatibility	CE, FCC A, EN 61000-6-4, EN 61000-6-3, CISPR22, RoHS		
Vibration during operation	Tested according to DIN IEC 60068-2-64: 5 - 500 Hz: 1 Grms		
Shock during operation	Tested according to DIN IEC 60068-2-27: 15 gn for 11 ms		
Ambient temperature	0...50°C (32...122°F)		
Relative humidity	30% to 95% at 40°C (no condensation)		
Certifications / regulations	UL/cUL/CB 62368, UL/cUL/CB 61010, IP66, NEMA 4/4X		
Physical Specifications			
Operator panel / cut-out (W x H)	297 x 236 mm	387 x 291 mm	408 x 313 mm
Installation dimensions (W x H x D)	313.5 x 246 x 79.6 mm	397 x 311.5 x 79.6 mm	418 x 353.7 x 79.6 mm
Product weight (kg / lb)	7.8 / 17.1	8.9 / 19.6	9.8 / 21.7
Warranty			
Period	12 months		

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# Standard HMI Touch Panels (16:9)

Part Number			
	HMI-TSND0U-15SC-X00H	HMI-TSND0U-18SC-X00H	HMI-TSND0U-22SR-X00H
Display			
Size in inches / resolution in pixels	15.6" / FWXGA, 1366 x 768	18.5" / FWXGA, 1366 x 768	21.5" / HD, 1920 x 1080
Brightness / luminance	400 nits / 400 cd/m <sup>2</sup>	250 nits / 250 cd/m <sup>2</sup>	250 nits / 250 cd/m <sup>2</sup>
MTBF of backlight	LED-backlight up to 100,000 hours in Eco mode		
Touchscreen	Multi-touch (projected capacitive)		Single-touch (resistive analog) / Multi-touch (projected capacitive) optional
System Hardware			
Processor	Intel® Atom™ E3845 Processor; 2M Cache, 1.91 GHz, 10 W maximum TDP		
Cores / speed	4 / 1.91 GHz		
Memory / # of slots	From 4 GB DDR3L 1333 SDRAM, configurable up to 8 GB / 2 slots		
Graphics / video	Intel HD graphics; DirectX 11.1, OpenCL / GL, and 4K videos Quick Sync encoder		
Drives			
Mass storage	1 x 180 GB SSD		
Secondary storage	32 GB m-SATA SSD		
Optical drives	Connection via USB port		
Interface Ports			
Ethernet	2 x Ethernet TCP/IP - RJ45		
USB	4 x USB 2.0		
Serial	COM1: RS-232/422/485, isolated		
Graphics / video	1 x VGA; 1 x HDMI		
Audio	1 x Line-in, 1 x Line-out		
General Features			
Operating system	Windows Embedded 7 32 or 64-bit / Windows Embedded 8		
Current supply	9 - 36 V DC, isolated		
Bezel / housing	Stainless steel / aluminum		
Mounting options	Panel PC: Panel / wall mount; Box PC: Wall / DIN rail mount		
Packages / bundles	Packages with Wonderware InTouch, ready-to-use HMI software (optional)		
Environment / Ambient Conditions			
Degree of protection / thermal	Front: IP66; Rear: IP20 / Fanless		
Electromagnetic compatibility	CE, FCC A, EN 61000-6-4, EN 61000-6-3, CISPR22, RoHS		
Vibration during operation	Tested according to DIN IEC 60068-2-64: 5 - 500 Hz: 1 Grms		
Shock during operation	Tested according to DIN IEC 60068-2-27: 15 gn for 11 ms		
Ambient temperature	0...50°C (32...122°F)		
Relative humidity	30% to 95% at 40°C (no condensation)		
Certifications / regulations	UL/cUL/CB 62368, UL/cUL/CB 61010, IP66, NEMA 4/4X		
Physical Specifications			
Operator panel / cut-out (W x H)	412.4 x 261.7 mm	479.3 x 300.3 mm	534 x 331 mm
Installation dimensions (W x H x D)	446 x 276.5 x 79.6 mm	495 x 316 x 79.6 mm	552.6 x 343.8 x 79.6 mm
Product weight (kg / lb)	9.3 / 20.4	10.5 / 23.1	11.7 / 25.8
Warranty			
Period	12 months		

## Compact HMI Touch Panels

Part Number			
	HMI-TCND0U-07AR-X00H	HMI-TCND0U-10AR-X00H	HMI-TCND0U-15AR-X00H
Display			
Size in inches / resolution in pixels	7" / WVGA, 800 x 480	10.1" / WXGA, 1280 x 800	15" / XGA, 1024 x 768
Brightness / luminance	350 nits / 350 cd/m <sup>2</sup>	300 nits / 300 cd/m <sup>2</sup>	350 nits / 350 cd/m <sup>2</sup>
MTBF of backlight	LED-backlight up to 100,000 hours in Eco mode		
Touchscreen	Single-touch (resistive analog) / Multi-touch (projected capacitive) optional		
System Hardware			
Processor	Intel® Celeron® N2930 Processor; 2M Cache up to 2.16 GHz, 7.5 W maximum TDP		
Cores / speed	4 / 1.83 GHz		
Memory / # of slots	On board 4 GB DDR3		
Graphics / video	Intel HD graphics; DirectX 11.1, OpenCL / GL, and 4K videos Quick Sync encoder		
Drives			
Mass storage	1 x 32 GB SSD		
Secondary storage	1 x SD slot		
Optical drives	Connection via USB port		
Interface Ports			
Ethernet	2 x Ethernet TCP/IP - RJ45		
USB	1 x USB 2.0, 1 x USB 3.0	2 x USB 2.0, 2 x USB 3.0	
Serial	COM1: RS-232/422/485; COM2: RS-232	COM1: RS-232/422/485; COM2: RS-232; COM5: RS-232	
Graphics / video	1 x HDMI		
Audio	1 x Line-out		
General Features			
Operating system	Windows Embedded Compact 7 / Windows Embedded 7 32 or 64-bit / Windows Embedded 8		
Current supply	11 - 32 V DC		
Bezel / housing	Aluminum die-casting		
Mounting options	Panel / wall mount		
Packages / bundles	Packages with Wonderware InTouch, ready-to-use HMI software (optional)		
Environmental / Ambient Conditions			
Degree of protection / thermal	Front: IP65; Rear: IP20 / Fanless		
Electromagnetic compatibility	CE, FCC A, EN 61000-6-2, EN 61000-6-3, CISPR22, RoHS		
Vibration during operation	Tested according to DIN IEC 60068-2-6: 10-500 Hz: 1G / 3 axis		
Shock during operation	Tested according to DIN IEC 60068-2-27: 15G, 11 ms duration		
Ambient temperature	0...50°C (32...122°F)		
Relative humidity	10 to 90% at 40°C (non-condensing)		
Certifications / regulations	UL/cUL/CB 62368, UL/cUL/CB 61010		
Physical Specifications			
Operator panel / cut-out (W x H)	192 x 138 mm	272 x 176 mm	392 x 292 mm
Installation dimensions (W x H x D)	202 x 149 x 39 mm	285 x 189 x 49 mm	401 x 310 x 55 mm
Product weight (kg / lb)	1.2 / 2.6	2.1 / 4.6	4.4 / 9.7
Warranty			
Period	12 months		

Due to printing and photography, products and colors shown in this brochure may vary slightly from actual products. Technical specifications may change from the published date of this document. Most modifications are changes for product improvements. Specifications are subject to change without notice. For the most current and update information on our HMI solutions, please also consult our web site at [www.aispro.com/products/hmi-touch-panels](http://www.aispro.com/products/hmi-touch-panels).

# Compact-Lite HMI Touch Panels

Part Number			
	HMI-TGND0D-04PR-C00H	HMI-TGND0D-07PR-C00H	HMI-TGND0D-10AR-C00H
Display			
Size in inches / resolution in pixels	4.3" / WQVGA, 480 x 272	7" / WVGA, 800 x 480	10" / XGA, 1024 x 768
Brightness / luminance	400 nits / 400 cd/m <sup>2</sup>	300 nits / 300 cd/m <sup>2</sup>	250 nits / 250 cd/m <sup>2</sup>
MTBF of backlight	LED-backlight up to 30,000 hours in Eco mode	LED-backlight up to 50,000 hours in Eco mode	
Touchscreen	Single-touch (resistive analog)		
System Hardware			
Processor	ARM® Cortex® A8 667 MHz		ARM® Cortex® A8 1.0 GHz
Memory	On board 256 MB SDRAM		
Drives			
Flash memory (ROM)	128 MB		
Secondary storage	1 x SD slot		
Optical drives	Connection via USB port		
Interface Ports			
Ethernet	1 x Ethernet 10/100 Mbps - RJ45		
USB	1 x USB 2.0		
Serial	COM 1: RS-232, DB9 Male; COM 2: RS-232/422/485, DB25 Female		
General Features			
Operating systems	Windows Embedded CE 6.0		
Current supply	11 - 36 V DC		
Bezel / housing	Plastic / plastic		Aluminum / metal
Mounting options	Panel / wall mount		
Packages / bundles	Packages with Wonderware InTouch, ready-to-use HMI software (optional)		
Environmental / Ambient Conditions			
Degree of protection / thermal	Front: IP65; Rear: IP20 / Fanless		
Electromagnetic compatibility	CE, FCC A, EN 61000-6-2, EN 61000-6-4, CISPR 11, RoHS		
Ambient temperature	0...50°C (32...122°F)		
Relative humidity	10 to 90% at 40°C (non-condensing)		
Certifications / regulations	UL 508 and CSA C22.2 No. 142		
Physical Specifications			
Operator panel / cut-out (W x H)	123 x 99 mm	197 x 141 mm	310 x 248 mm
Installation dimensions (W x H x D)	140 x 116 x 57 mm	212 x 156 x 57 mm	325 x 263 x 56 mm
Product weight (kg / lb)	0.5 / 1.1	1.2 / 2.6	3.6 / 7.9
Warranty			
Period	12 months		



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