



Advantages of
Using Industrial Computers in Smart Factories

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# What is a **Smart Factory?**

- It is an area where production equipment is intertwined with digital technology to improve production efficiency through continuous monitoring and self-optimisation.
- It connects the digital and physical worlds to monitor the entire production process, from supply chain management to production tools and even the work of individual operators on the shop floor.
- It uses equipment and devices that enable data-driven decision-making to optimise efficiency and productivity throughout the production process.



# Advantages of Being a Smart Factory

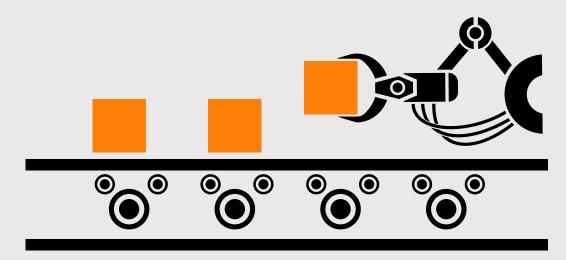
Cost reduction

Reduction in the utilisation of resources Reduction in carbon dioxide emissions Income increase Productivity increase Reduction of production time Reduction of machine downtime Increase in machine life Reduction in error level Improvement in employee safety

# What is an Industrial Computer?

- Industrial Computers are devices designed to be used in production facilities and challenging environmental environments.
- They are used in production data collection, process analysis and control, operator panel applications, and machine and process automation applications.

#### **Production Data Collection**



#### **Process Analysis and Control**



#### Machine and Process Automation



#### **Operator Panel**





# Why Industrial Computers Should be Preferred in Smart Factories?

# Robust Design, Resistant to Harsh Conditions



- \*Resistant to harsh production conditions.
- \* Resistant to contact with liquids, dust particles, debris, vibration and other substances that may endanger electronic components.



\*Fails and wears out under harsh conditions.

\*It can become unusable quickly with temperature, chemicals, humidity, polluted air and various particles.



## Big Data Analysis



# Follow-up of Business Processes

- To realise the control of processes in an automated way,
- To achieve error-free and continuously renewed production data,
- To be able to view the results regularly thanks to instantly processed data,
- To be able to programme the stopping and working times of the machines,
- Measure and visualise staff and overall productivity,
- To make an automatic follow-up of the periodic maintenance as well as production,
- To eliminate the loss of time and money during manual data collection,
- Automatic data sharing with programs such as CRM, ERP and Excel.

# "Provides vital benefits in terms of production."



## Paperless Factory



With digital documents, operators in the production plant can quickly access, process, backup and share the necessary information.



Since using digital documents will reduce paper use, it offers significant cost advantages to businesses and minimises the risk of loss in unexpected situations.



By using the stored information, important documents can be filled in automatically, thus increasing efficiency in the process and reducing the margin of error to zero.



## Predictive Maintenance

#### (Automatic Check-Up)



As sensors on the machines capture data about performance and productivity, this data is quickly sent to industrial computers, where it can be stored.

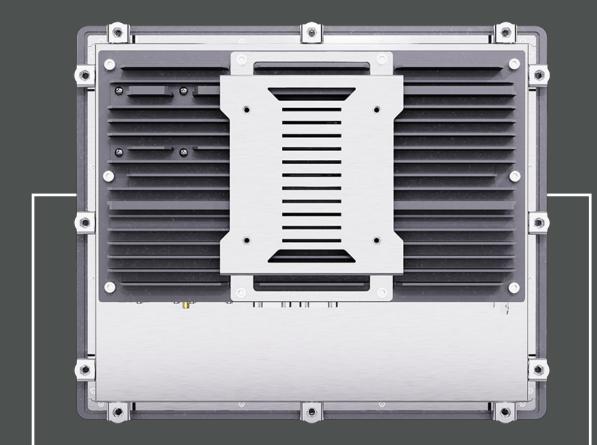


Predictive maintenance software analyses performance to understand why a machine's production is slowing down. It identifies the problem and automatically notifies workers at their workstations.



This way, plants can take precautions, start repairs if necessary, and order spare parts and machinery before they suffer a much more costly breakdown.







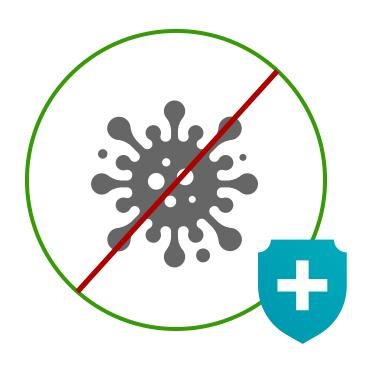
01

Panel PCs use a passive cooling system instead of fans to keep the computers' heat levels low. Another advantage of this fanless design is that it saves energy.

## Ergonomics

02

Because panel PCs have no fans, there are fewer moving parts, so dust and other debris do not circulate within the computer system. This reduces the need for regular cleaning and maintenance of Panel PCs, maximising confidence in their trouble-free performance in critical business operations.







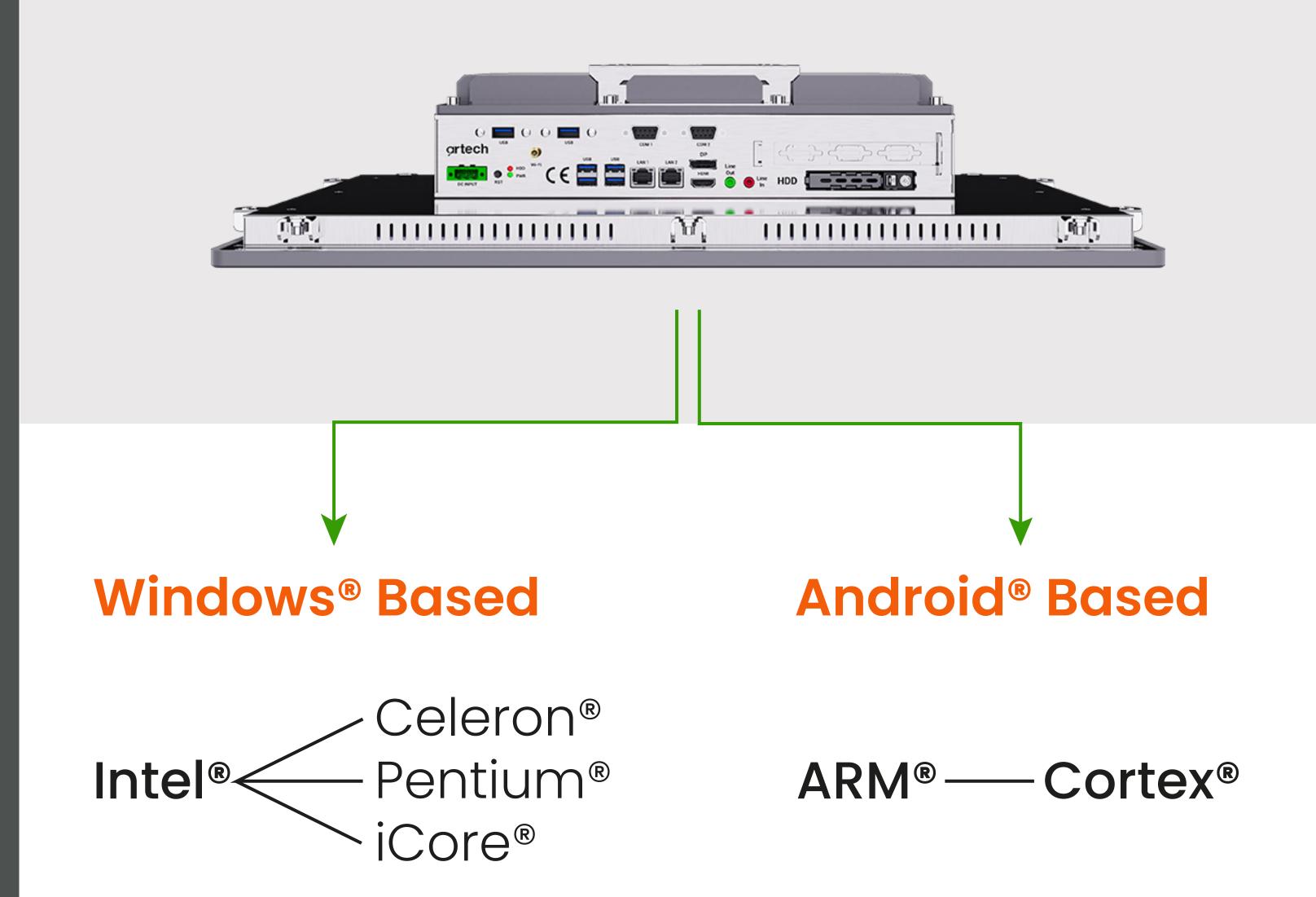
03

An organised, modern working environment is possible without using space-consuming accessories such as keyboards, mice and other computer peripherals.

# ADVANTAGES OF ARTECH INDUSTRIAL COMPUTER SOLUTIONS

## PROCESSOR

Low energy use and higher performance with passive cooling

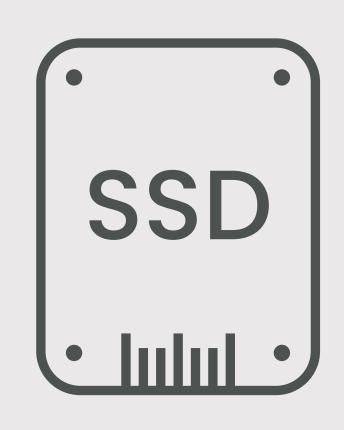


## TEMPERATURE RESISTANCE

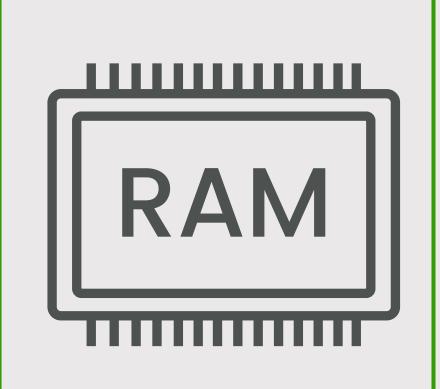


60°C

Temperature Resistant



Industrial Grade SSD Resistant to 70°C of Temperature



Industrial Grade RAM Resistant to 80°C of Temperature)

# LIQUID PROTECTION

ULTIMATE SERIES

PERFORMANCE SERIES

STAINLESS SERIES

VERSATILE SERIES



# IP 65 STANDARD

It is dustproof and protects low-pressure water from all directions.









# LIQUID PROTECTION

WATERPROOF SERIES



# IP 66 STANDARD

It is dustproof and protects high-pressure water that can come from all directions.

IP66 standard is preferred in medical, construction and food production facilities.

If the Conditions are Extreme, The Solution is artechnology Industrial Panel Computer





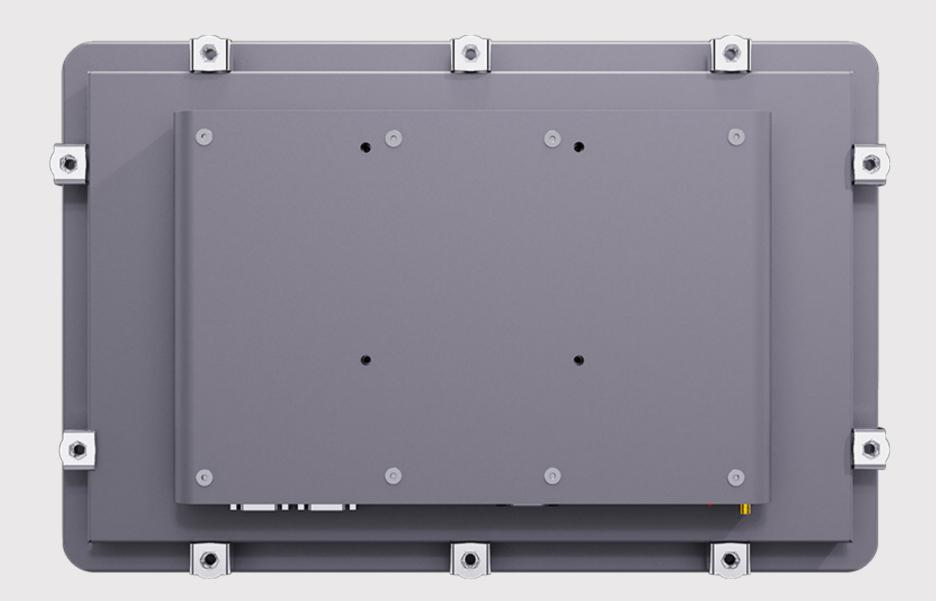
# No Leakage WATERPROOF SERIES



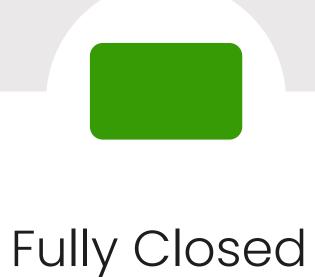




# DUST PROTECTION









Industrial Grade Stainless Steel

### ERGONOMICS

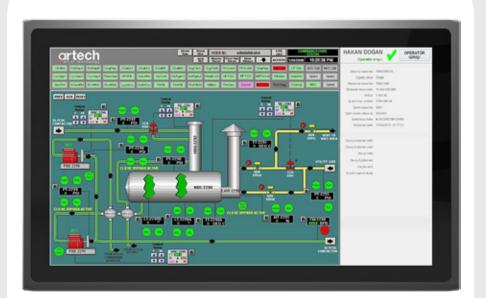
# SCREEN SIZE



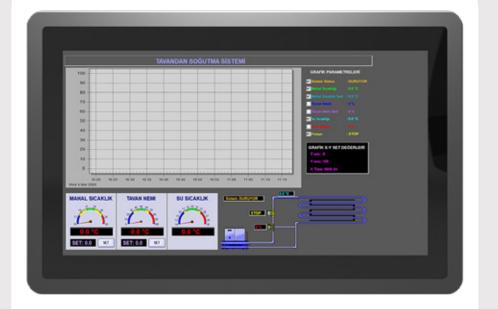
10" / 15" / 17" / 21"
TFT Screen Model Options

### ERGONOMICS

# TOUCH SCREEN



Resistive Flat-Touch



Capacitive Multi-Touch



Industrial
Membrane
Keypad
&
Touchpad



Requires pressure on the touchscreen.



It does not require pressure on the touch screen and can sense the object's proximity.

#### 3mm. Thickened, Impact-Reinforced

### ERGONOMICS

# TOUCH SCREEN



Resistive and Capacitive Flat-Touch Technology

# FAST RESPONSE TO FAILURE WITH NO LOSS OF COST

# FAST RESPONSE

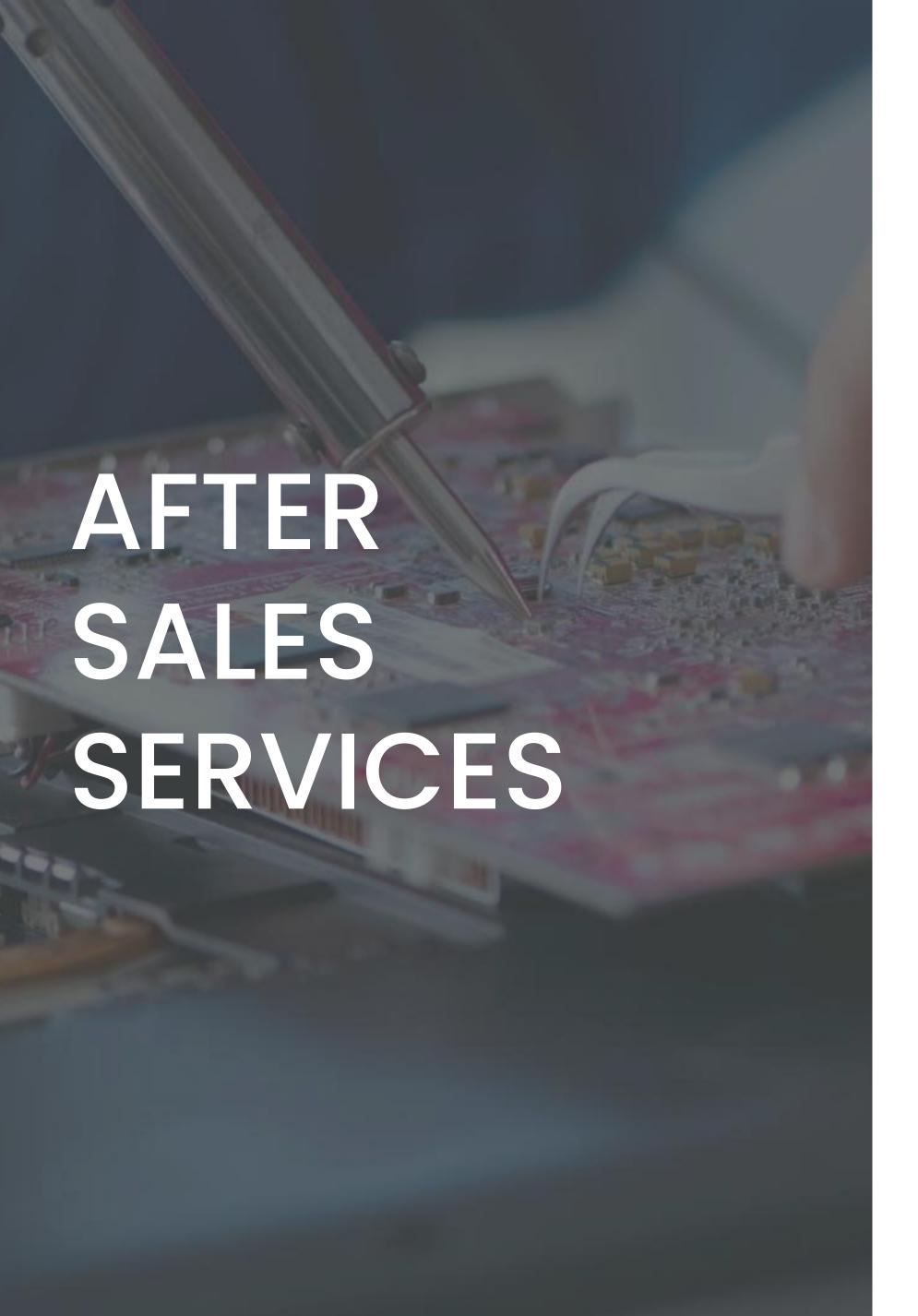


# SUITABLE MOUNTING FOR YOUR WORKING ENVIRONMENT

# MOUNTING



Compliance with Panel and Vesa Mounting

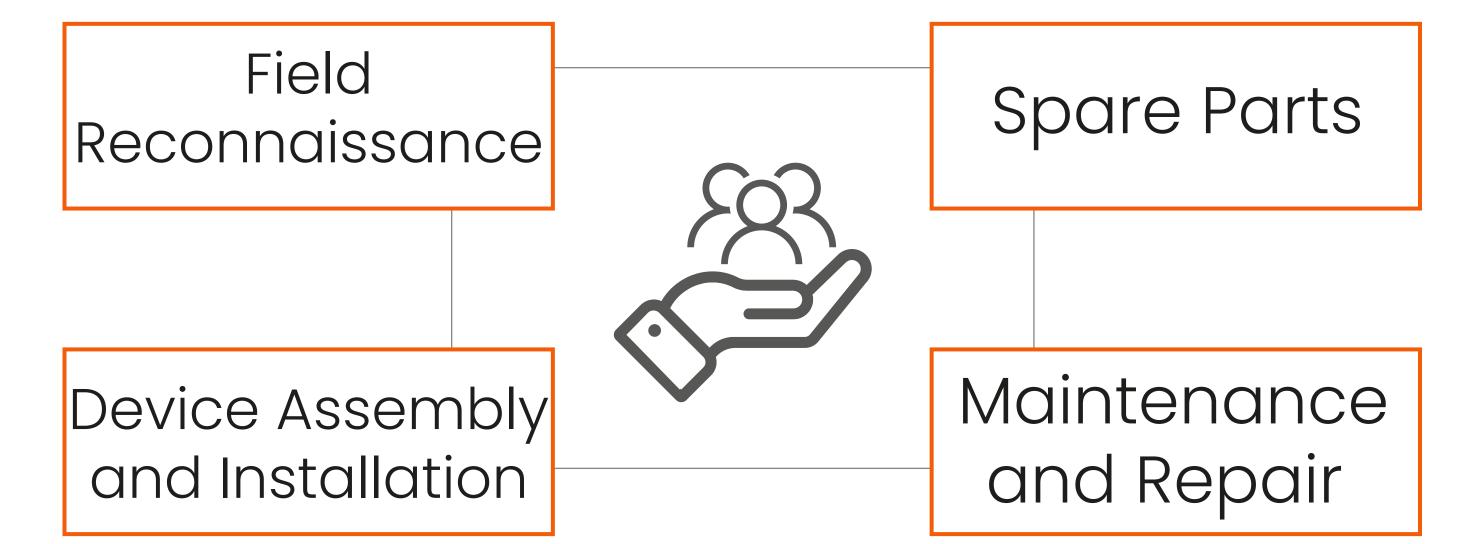






Up to 5 years spare parts supply warranty

Our After-Sales Services offer the following services to our customers:







Scan the QR code for our references.

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Çizgi Teknoloji Elektronik Tasarım ve Üretim A.Ş.

