

artech

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Advantages of Using Industrial Computers in Smart Factories

➤➤ What is a Smart Factory?

➤➤ Advantages of Being a Smart Factory

➤➤ What is an Industrial Computer?

➤➤ Why Industrial Computers Should be Preferred in Smart Factories?

➤➤ Advantages of Artech Industrial Computer Solutions

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 optimize efficiency and productivity throughout the production process.



Advantages of Being a Smart Factory

1 Cost reduction

2 Increase in customer satisfaction



3 Reduction in the utilization of resources

4 Reduction in carbon dioxide emissions

5 Income increase

6 Productivity increase

7 Reduction of production time

8 Reduction of machine downtime

9 Increase in machine life

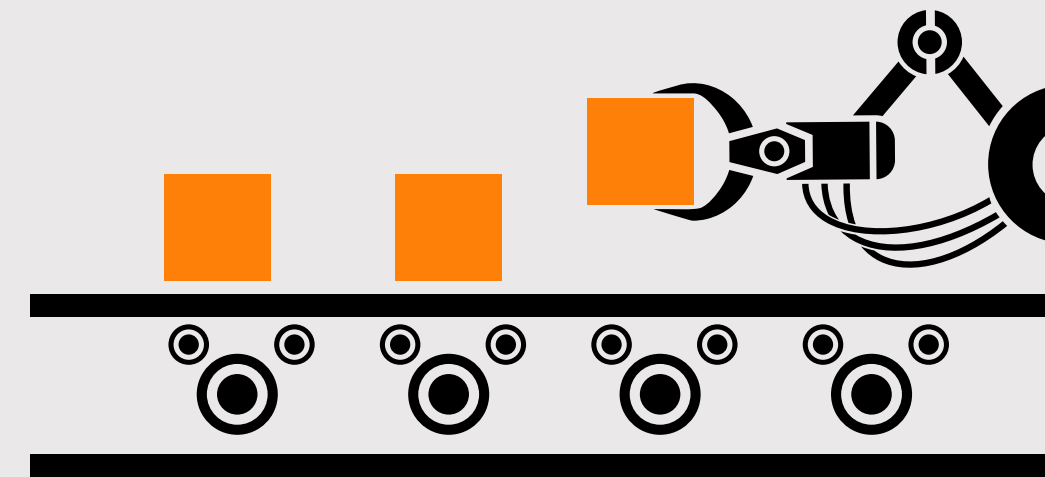
10 Reduction in error level

11 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



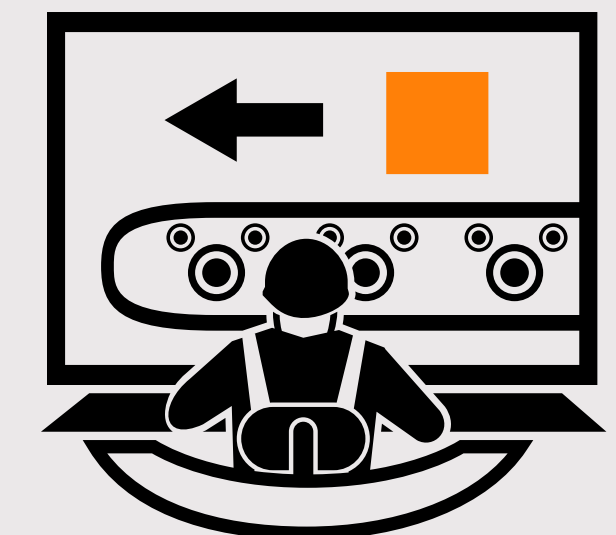
Process Analysis and Control



Machine and Process Automation



Operator Panel





Why Industrial Computers
Should be Preferred
in Smart Factories?

Robust Design, Resistant to Harsh Conditions



INDUSTRIAL PANEL COMPUTER



***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.

PERSONAL COMPUTER



Big Data Analysis



Follow-up of Business Processes

- To realize 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 program the stopping and working times of the machines,
- Measure and visualize 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.”



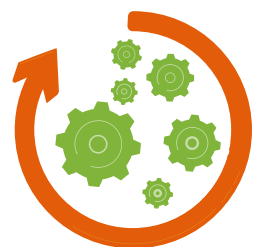
Paperless Factory



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 minimizes 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.



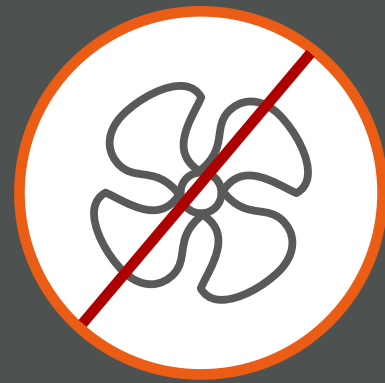
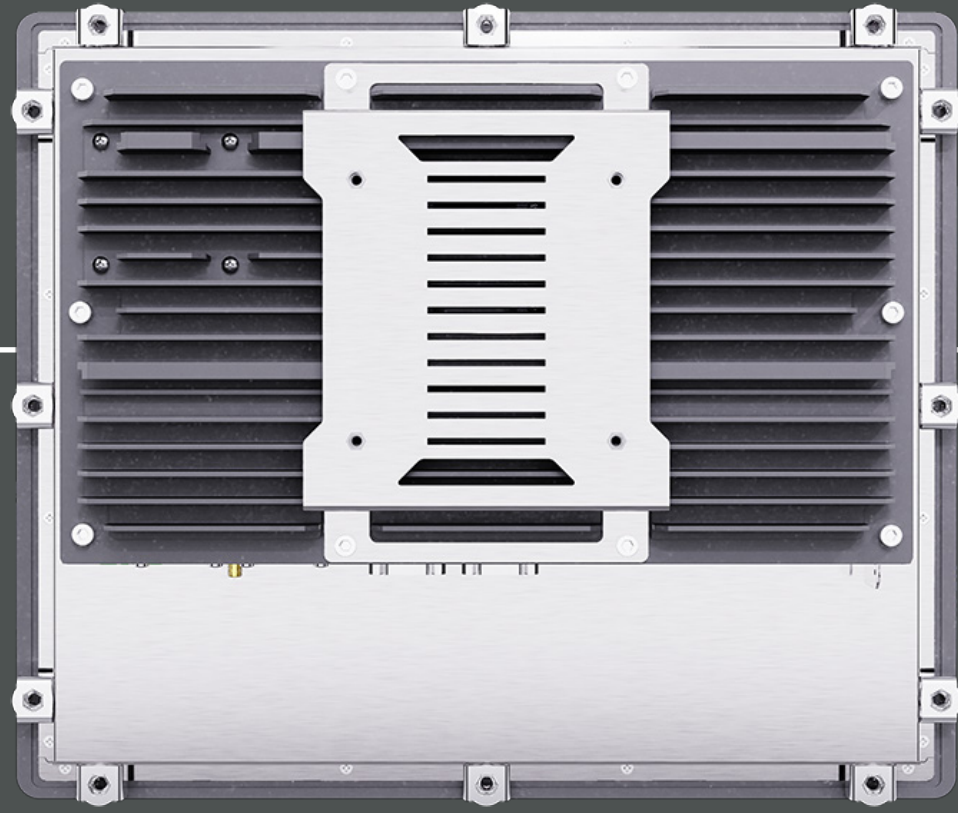
Predictive maintenance software analyses performance to understand why a machine's production is slowing down. It identifies the problem and automatically notifies workers at their workstations.



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



Ergonomics

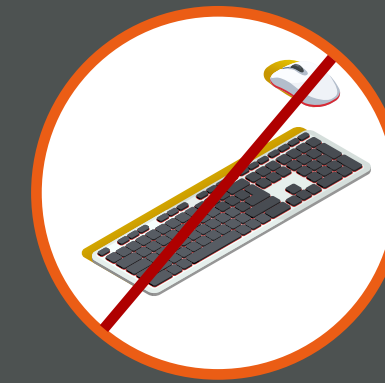
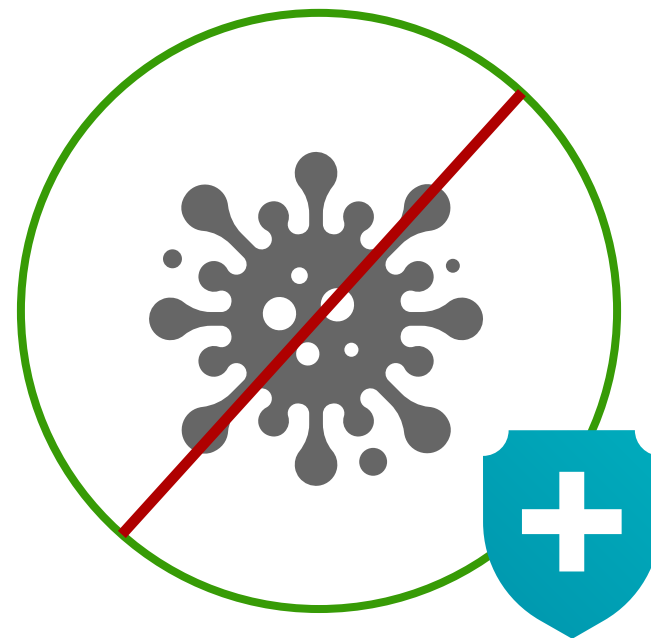


01

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.

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, maximizing confidence in their trouble-free performance in critical business operations.



03

An organized, 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



Windows[®] Based

Android[®] Based

Intel[®] — Celeron[®]
Pentium[®]
iCore[®]

ARM[®] — Cortex[®]

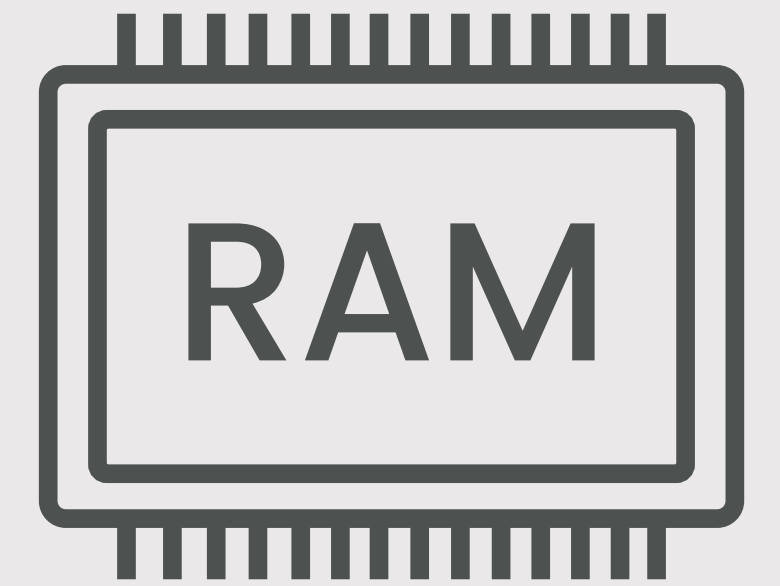
TEMPERATURE RESISTANCE



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.

At the Peak of
Performance and Durability

ULTIMATE SERIES



If the Conditions are Extreme, The Solution is
artech Industrial Panel Computer
art of technology





Improve Efficiency and Agility,
Challenge Competition

PERFORMANCE SERIES



If the Conditions are Extreme, The Solution is
artech Industrial Panel Computer
art of technology

When hardness meet's resistance

STAINLESS SERIES



If the Conditions are Extreme, The Solution is
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That's what my game is built around: versatility. (Karl Anthony Towns)

Outstanding success,
adaptable to all conditions

VERSATILE SERIES



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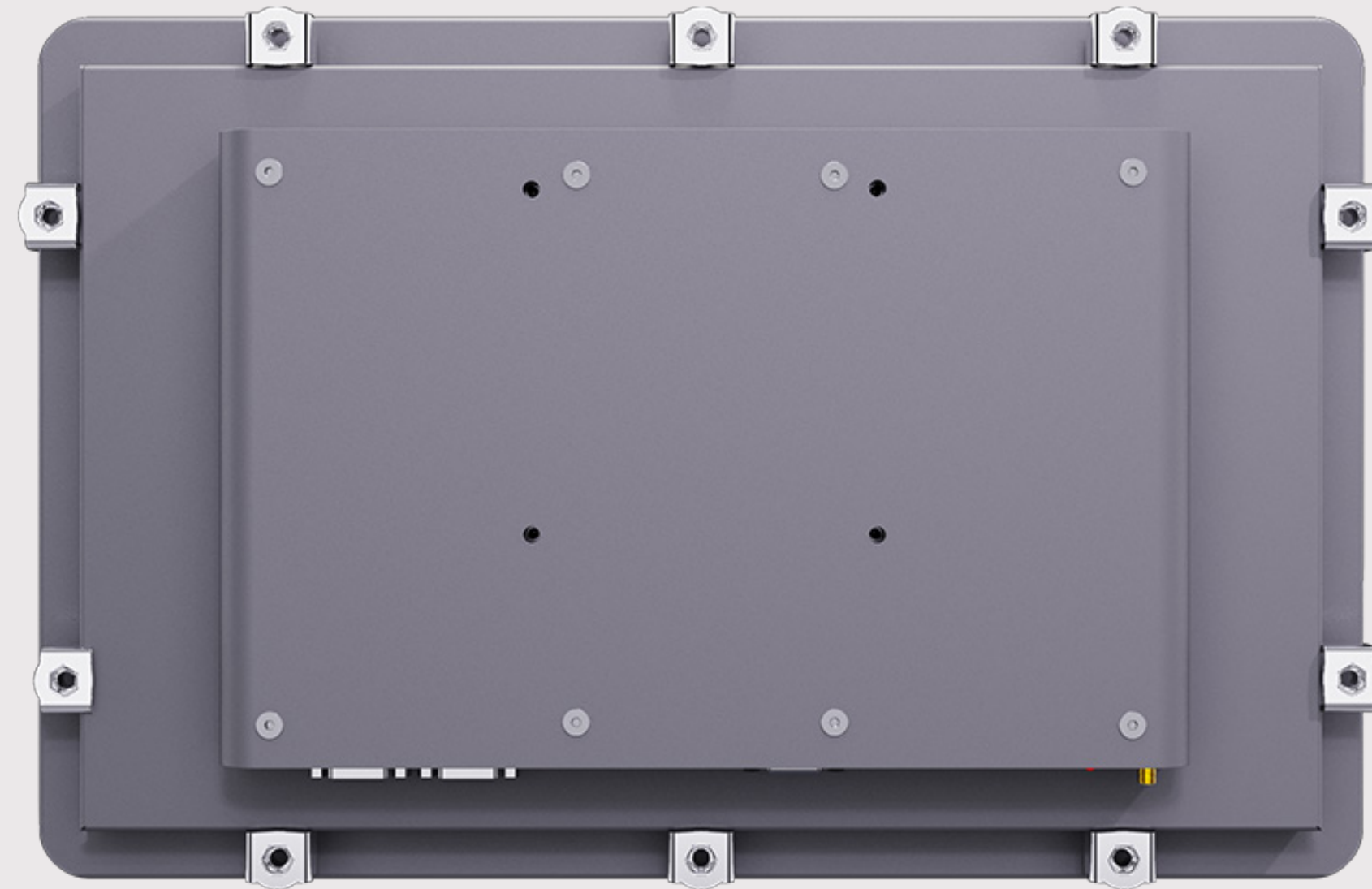


Fear No Leakage

WATERPROOF SERIES



DUST PROTECTION



Fanless



Fully Closed



Dust Proof

Industrial Grade Stainless Steel

ERGONOMICS

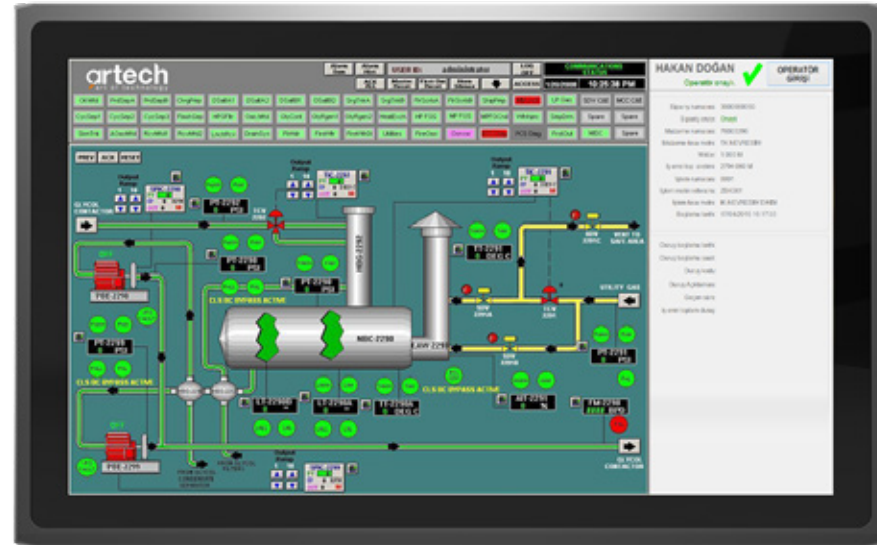
SCREEN SIZE



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

ERGONOMICS

TOUCH SCREEN



**Resistive
Flat-Touch**



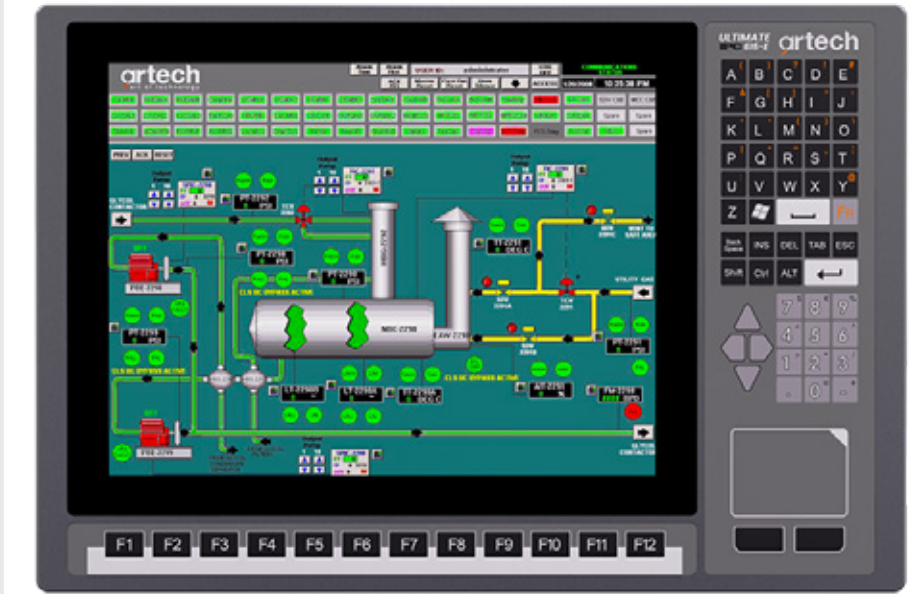
Requires pressure on the touchscreen.



**Capacitive
Multi-Touch**



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



**Industrial
Membrane
Keypad
&
Touchpad**

ERGONOMICS

TOUCH
SCREEN

3mm. Thickened, Impact-Reinforced



**Resistive and Capacitive
Flat-Touch Technology**

FAST
RESPONSE

FAST RESPONSE
TO FAILURE WITH NO LOSS OF COST



Only 15 seconds
with **ARTECH™** Technology!

SUITABLE MOUNTING FOR YOUR WORKING ENVIRONMENT

MOUNTING



Compliance with Panel and Vesa Mounting

AFTER SALES SERVICES

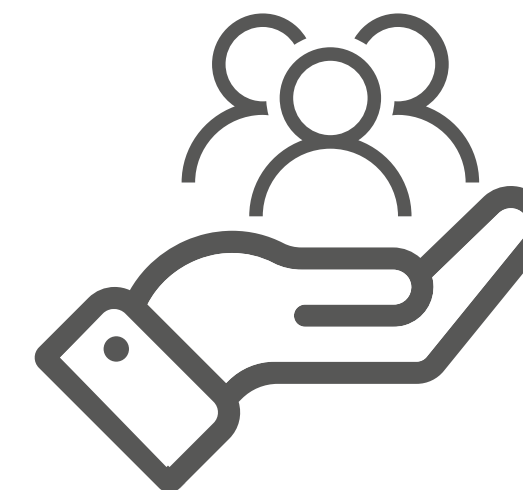
 Up to 3 years warranty

 Up to 5 years spare parts supply warranty

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

Field
Reconnaissance

Device Assembly
and Installation



Spare Parts

Maintenance
and Repair



ÇİZGİ TEKNOLOJİ



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Çizgi Teknoloji Elektronik Tasarım
ve Üretim A.Ş.



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