

SuperAI-SOP

AI Behavioral Analysis System

SuperAI-SOP features robust hardware compatibility and software integration capabilities, enabling seamless integration into existing production lines. It focuses on three core scenarios: product assembly, visual inspection, and packaging. By identifying key actions and anomalies, the system effectively reduces quality risks. It offers two operating modes – Interactive Mode and Passive Mode. The former is designed for high-precision rejection of defective products, while the latter enables efficient data collection to drive process improvement. Together, they accommodate diverse production rhythms and quality control requirements.

NO.1 Strong System Integration Compatibility

SuperAI-SOP seamlessly integrates with customers' existing production line hardware and software. It supports direct communication with line PLCs for control signal exchange and line start/stop, while also enabling deep integration with Manufacturing Execution Systems (MES) to automatically upload inspection data and defect statistics, forming a closed-loop quality data system—all without requiring major overhauls to the existing production line logic.

NO.2 Key Action Recognition and Error-Proofing Control

Automatically identifies whether operators are performing tasks in accordance with Standard Operating Procedures (SOP), and monitors abnormal behaviors such as omissions or errors in real time, reducing human mistakes and improving consistency in product assembly.

NO.3 AI Vision Assistance and Full-Process Traceability

In the visual inspection phase, SuperAI-SOP leverages AI to assist inspectors in detecting surface defects on products. It automatically identifies scratches, dents, stains, color differences, and other imperfections, and guides inspectors through a standard inspection path to ensure full coverage without missed areas. Meanwhile, it automatically records inspection results and barcode data, enabling full-process traceability.

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NO.4 Smart Mistake-Proofing and Completeness Verification Before Shipment

SuperAI-SOP monitors packing completeness, packaging material verification, label application, and carton sealing quality. Through behavior monitoring and OCR technology, the system effectively prevents missing accessories or instruction manuals, as well as incorrect or missing labels. This eliminates incorrect or incomplete shipments and reduces customer complaints.

NO.5 Flexible Dual Operating Modes

SuperAI-SOP offers two operating modes: Interactive Mode and Passive Mode. In Interactive Mode, the system immediately stops the line upon detecting an NG (non-conforming) event, with a three-color tower light providing clear visual status indication to ensure that defective products do not pass through. In Passive Mode, the system runs silently in the background, continuously recording NG data and videos without affecting production efficiency.



Wearable Devices
(AR glasses, body-worn cameras, etc.)



Mobile Devices
(Tablets, smart-phones, etc.)



Surveillance Video System
(RTSP protocol)

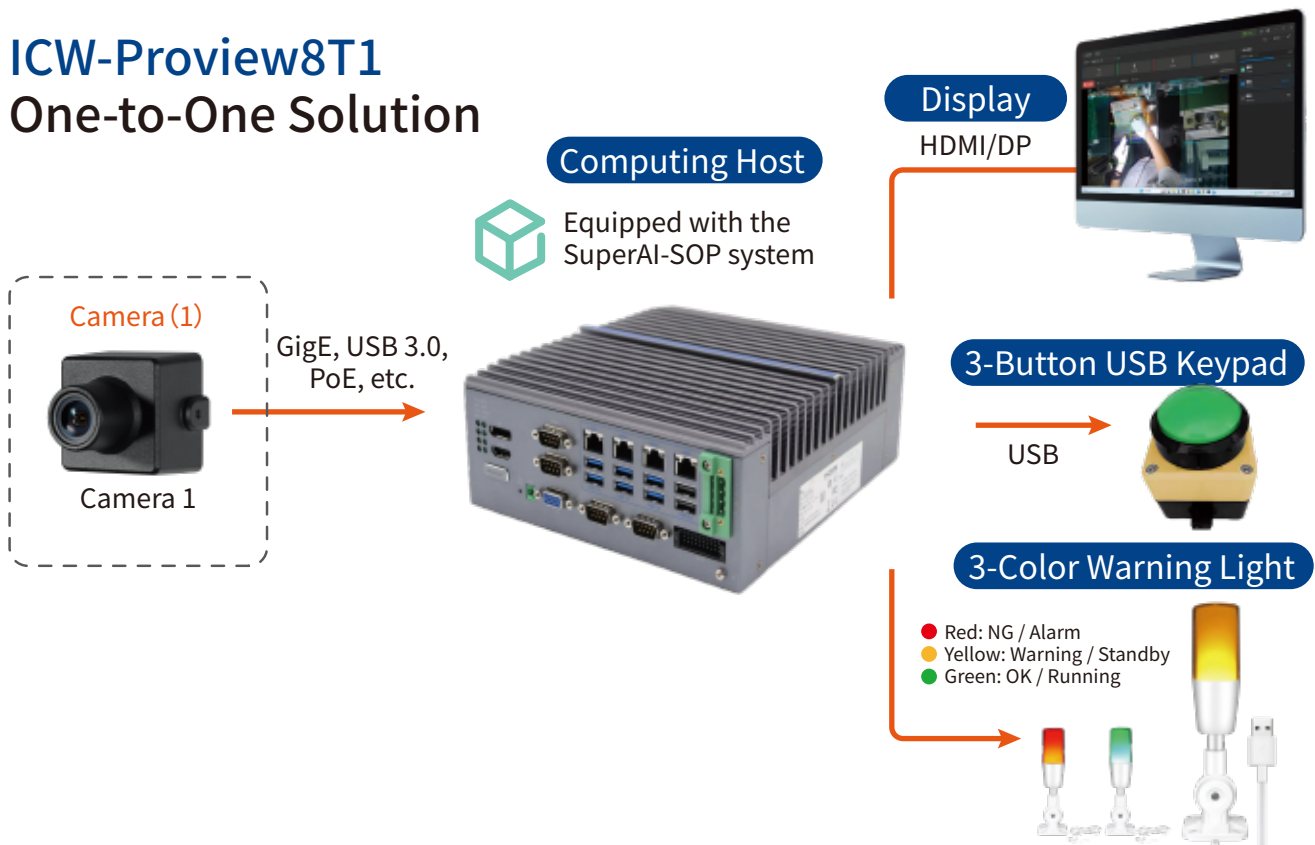


Drones

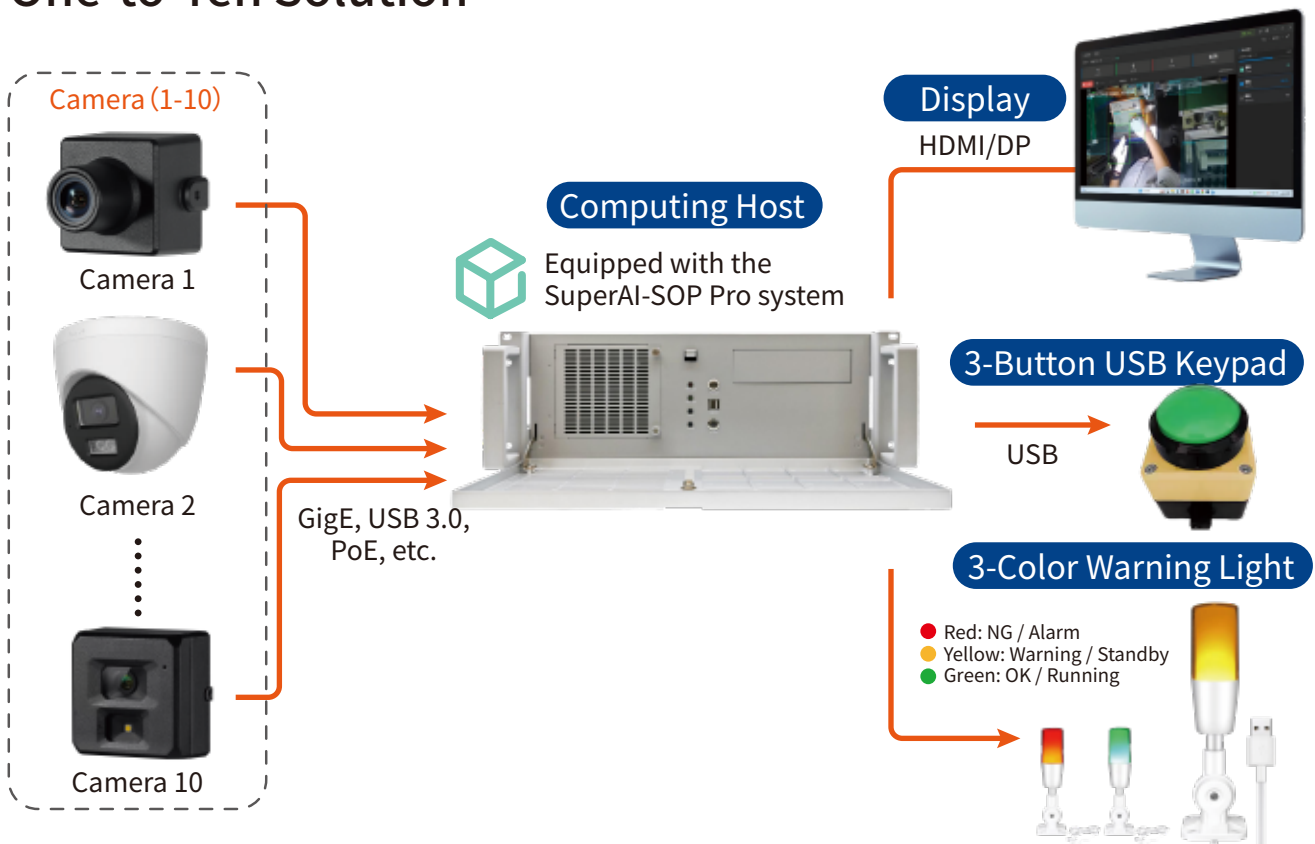


AGV

ICW-Proview8T1 One-to-One Solution



ICW-Proview8TT One-to-Ten Solution



Camera Proview-L428/L440 Specifications

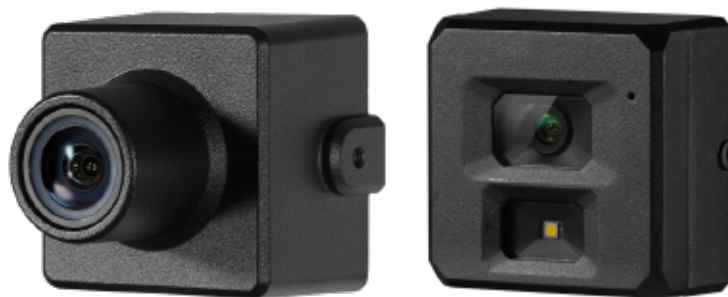


Image and Video Parameters

Sensor Type	1/3 inch
Minimum Illumination	0.0005 lux
Digital Noise Reduction	3D DNR
Gain Control	Auto
White Balance	Auto
Backlight Compensation	Auto
Bitrate	64Kbps~3Mbps
Focal Length	2.8mm/4mm
Field of View	H: 109.9°; V: 58.1°; D: 133.5°
Zoom Type	Fixed
Aperture Control	Auto
Max Image Size	2560x1440@25fps
Main Stream Resolution & Frame Rate	2560x1440@25fps
Sub-stream Resolution & Frame Rate	640x 360@25fps
Image Settings	Saturation, Brightness, Contrast, Sharpness, etc. adjustable

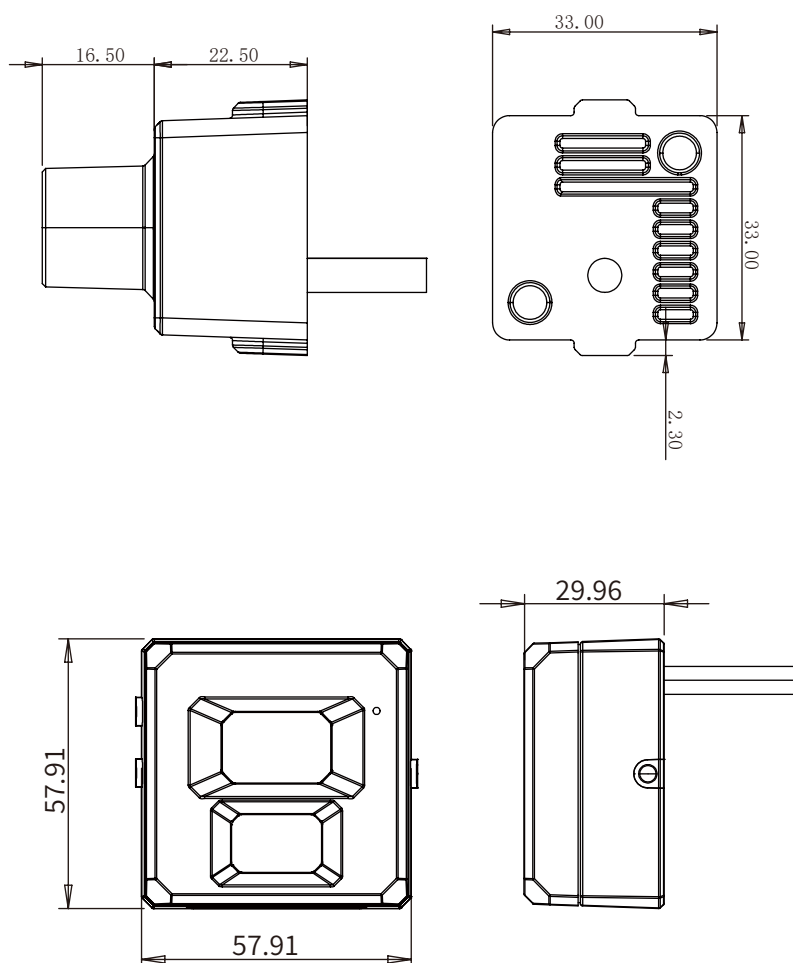
General Parameters

Network Interface	1 × RJ45 10/100 Mbps Ethernet port
Interface Protocols	ONVIF, GB28181, TUMS
Intelligent Alarm	Motion Detection; Video Masking
Protocols	TCP/IP, ICMP, HTTP, DHCP, DNS
Operating Temperature	-30°C~50°C
Operating Humidity	10%~90%, no condensation

Camera Proview-L428/L440 Specifications

General Parameters	
Power Interface	DC12~24V 1A
Power Consumption	4W
Dimensions	L428: 33mmx33mmx40mm L440: 58mmx58mmx30mm
Weight (g)	L428: 83.5g; L440: 171.9g

Dimensions (unit: mm)



Camera Proview-H228/H240/H428/H440 Specifications

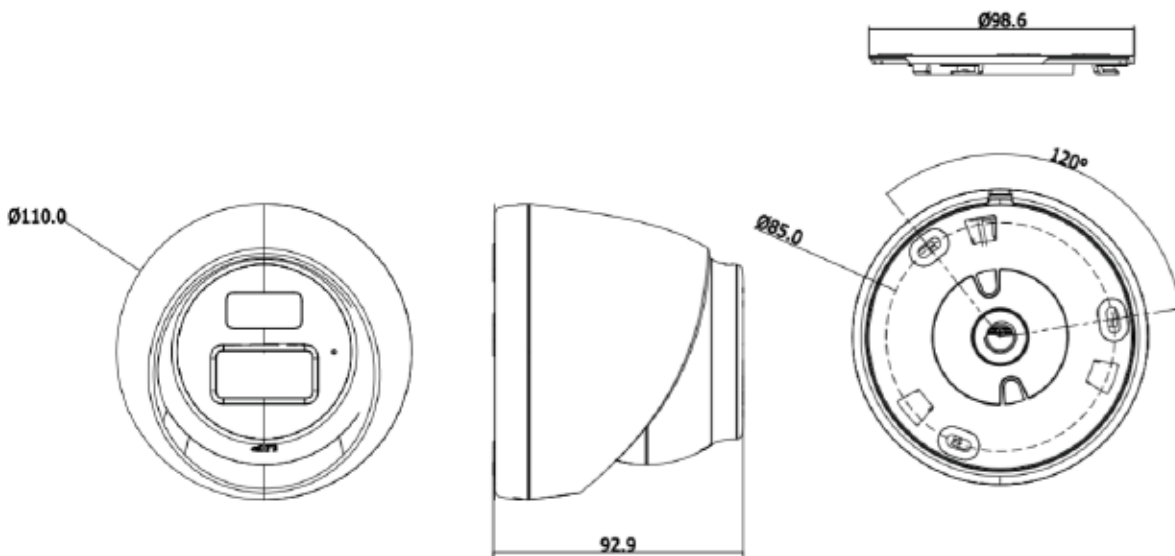


Camera	
Sensor Type	1/2.7" Progressive Scan CMOS
Minimum Illumination	Color: 0.01 Lux @ (F1.2, AGC ON) , 0 Lux with IR
Shutter Speed	1/3 s~1/100,000 s
Day/Night Switching Mode	ICR infrared cut filter
Adjustment Angle	Pan: 0°~360°, Tilt: 0°~75°, Rotate: 0°~360°
Lens	
Focal Length & Field of View	2.8 mm: Horizontal FOV: 104°, Vertical FOV: 58°, Diagonal FOV: 123° 4 mm: Horizontal FOV: 81.3°, Vertical FOV: 43.6°, Diagonal FOV: 96.9° 6 mm: Horizontal FOV: 51.8°, Vertical FOV: 27.7°, Diagonal FOV: 60.4°
Zoom Type	Fixed
Lens Mount	M12
Maximum Aperture	F2.0
Illumination	
Supplemental Light Type	Smart supplemental light, switchable between white light and IR light
Supplemental Light Distance	IR: up to 30 m; White light: up to 20 m
Anti-Overexposure	Supported
IR Wavelength Range	850 nm
Video	
Maximum Resolution	200W/400W
Bitrate	32Kbps~8Mbps
Network	
Network Protocols	TCP/IP, ICMP, HTTP, DHCP, DNS, RTP, RTSP, RTCP, NTP, IGMP, QoS, UDP
API Protocols	Open Network Video Interface, ISAPI, SDK, GB28181
Interface	
Network	1 × RJ45 10/100 Mbps auto-sensing Ethernet port

Camera Proview-H228/H240/H428/H440 Specifications

Image	
smartIR	Supported
Image Settings	Mirror, Saturation, Brightness, Contrast, Sharpness, AGC, White Balance adjustable via client software or browser
Day/Night Switching Mode	Day, Night, Auto, Scheduled Switching
Image Enhancement	Backlight Compensation, Highlight Suppression, 3D Digital Noise Reduction
Wide Dynamic Range	Digital WDR
General Parameters	
Dimensions	Ø110 × 93 mm
Weight (g)	285 g
Current & Power Consumption (Ø5.5 mm round power connector)	DC: 12 V, 0.42 A, Max. power: 5 W PoE: IEEE 802.3af, CLASS 3, Max. power: 6.5 W
Power Supply Modes	DC: 12 V ± 25%, with reverse polarity protection PoE: IEEE 802.3af, CLASS 3
Temperature & Humidity	-30 °C ~ 60 °C, Humidity ≤ 95% (non-condensing)
Ingress Protection	IP67

Dimensions (unit: mm)



One-to-One Industrial PC

Specifications

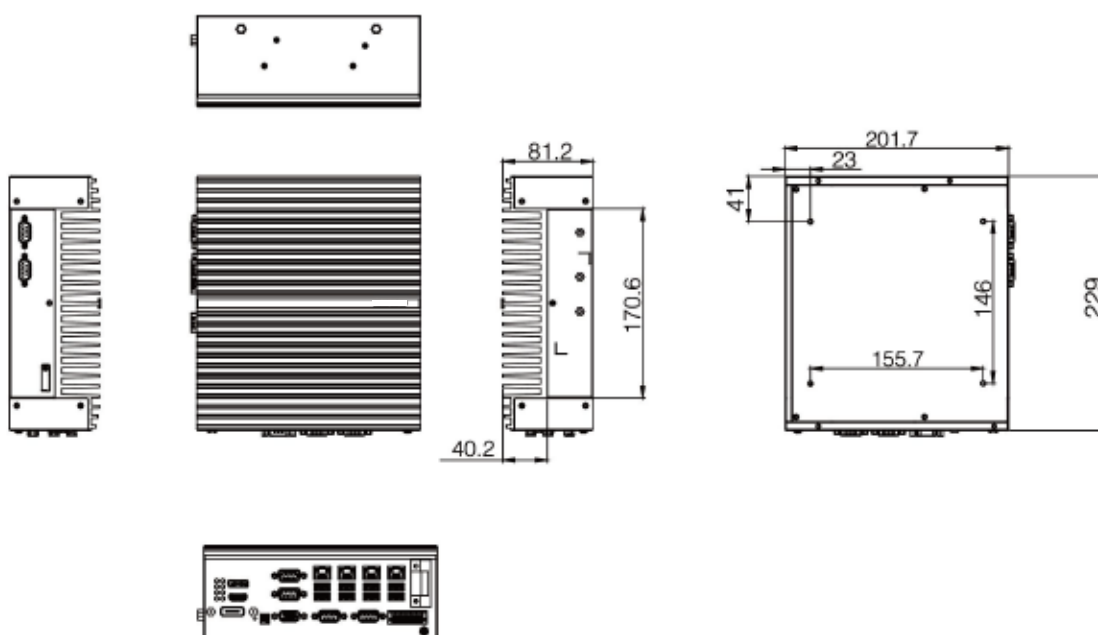


System	
Processor	Intel® i5-6500 Processors TDP up to 65W
Memory	2x Dual Channel (Non-ECC) DDR4 2133/2400/2666 MHz 260-pin DIMM Max to 32GB (16GB per DIMM)
Storage	256G/512G
Operating System	Supports Windows7 32/64bit, Windows10 64bit, Linux (Note: Windows 7 is supported only when using the Intel® 6th Gen Skylake platform.)
External Interfaces	
Ethernet	4x RJ45: 1x RJ45 Intel® I219-LM GbE (10/100/1000 Mbps) 3 x RJ45 Intel® I210-AT GbE (10/100/1000 Mbps)
Display	HDMI, DP++, VGA, supports asynchronous triple-display output
COM	4x COM ports (on board), with: COM1~2 (RS232/422/485), adjustable via BIOS TX/RX with 3KV isolation: COM3~4 (RS232/422/485) , adjustable via BIOS
USB	6x USB 3.0 2x USB 2.0
Internal Interfaces	
Expansion Slots	1x Full-size Mini-PCIe Slot for 4G module (PCIe + USB) 1x M.2 2280 slot for SSD (SATA 3.0) 1x M.2 2230 slot for Wifi module 1x M.2 3042/3052 for 5G module
USB	1x USB2.0 Type-A connector
COM	2x RS232 pin header
SATA	2x SATA 3.0, 2x SATA power
Power Supply	
Power Input	19~24V DC
Connector	4-pin Phoenix connector with locking mechanism

One-to-One Industrial PC Specifications

Environmental	
Operating Temperature	45/65W CPU, -10°C ~ 40°C (SSD) 35W CPU, -10°C ~ 50°C (SSD) 0°C ~ 40°C (HDD)
Storage Temperature	-40°C ~ 60°C
Operating Humidity	50°C 95%RH (35W CPU SSD)
Storage Humidity	60°C 95%RH, non-condensing
Random Vibration	5~500Hz, 2Grms (SSD) operation; 5~500Hz, 1Grms (HDD) operation
Sinusoidal Vibration	5~500Hz, 2G Non-operation
Mechanical Shock	Operation: 10G@11ms; Non-operation: 20G@11ms
Mechanical	
Housing Material	Aluminum Alloy
Mounting Options	Desk-Mount, Wall-Mount
Dimension	229 x 202 x 82 mm
Certifications	
Safety Certifications	CCC, CE, FCC, IC, UKCA

Dimensions (unit: mm)



One-to-Ten Industrial PC Specifications



System	
Processor	Intel® i7-12700 Processors with TDP up to 125W
Storage	256G/512G
Graphics Card	4060
Memory	2x Dual Channel (Non-ECC) DDR4 2133/2400/2666 MHz 260-pin DIMM Max to 32GB (16GB per DIMM)
Operating System	Windows 10, Linux
External Interfaces	
Expansion Interfaces	2x PCIe x16 (Gen3) , 2x16 slot, only support 1x16 or 2x8 3x PCIe x4 (Gen4) 1x PCIe x1 (Gen3) 1x PCI
Front Panel Interfaces	
USB	2x USB 2.0
Switches / LEDs	1x Power Button, 1x OS Recovery Button, 1x Power LED 1x HDD LED, 2x LAN LED
Rear Panel Interfaces	
COM	1x COM (RS232/422/485 auto-flow) supports 5V/12V power output (default: no power)
USB	2x USB 3.2 (Gen2) 2x USB 3.2 (Gen1)
Ethernet	4x RJ45: 3x Intel® Intel® I210-AT GbE (10/100/1000Mbps) 1x Intel® I219-V GbE (10/100/1000 Mbps)
Power Supply	
Power Input	ATX
ATX Power	300W / 500W / 650W / 850W /1250W ATX power support Redundant Power System
Connector	24-pin ATX power, 8-pin ATX 12V power

One-to-Ten Industrial PC Specifications

Mechanical	
Dimension	512mm x 482mm x 177mm
Mounting Type	Rack-Mount
Certifications	
Safety Certification	CCC
Environmental	
Operating Temperature	0°C ~ 40°C (HDD)
Storage Temperature	-40°C ~ 60°C
Operating Humidity	40°C 95%RH (HDD)
Storage Humidity	60°C 95%RH, Non-condensing
Random Vibration	5~500Hz, 2Grms (SSD) operation, 5~500Hz, 1Grms (HDD) operation
Sinusoidal Vibration	5~500Hz, 2G Non- operation
Mechanical Shock	Operation: 10G@11ms, Non-operation: 20G@11ms

Dimensions (unit: mm)

