

NEW 13th Gen Raptor Lake Solutions

a value
Technology Inc.

CRYSTAL DISPLAY SYSTEMS LTD

STAINLESS STEEL PANEL PCs

Key Features

SPC-xx33-B1 / SPC-xx42



Durability & Reliability

- Robust and durable stainless chassis, SPC-xx33-B1/xx42 with full system IP66/IP69K/M12, effectively resisting high-pressure water jets and harsh dust environments, ensuring stable and reliable operation.
- Easy to clean and disinfect and not easily harbor bacteria, very suitable for food processing, chemical, and outdoor applications



Flexibility

- **SPC-xx33-B1** onboard Apollo Lake processor, supports multiple OS (Windows 10, Linux, and Android) providing high software flexibility.
- **SPC-xx42** equipped with Raptor Lake-PS processors and DDR5 memory, delivers exceptional processing power for data acquisition and real-time control.



Internal Condensation Control

- Integrated air pressure relief valve equalizes internal and external pressure, preventing humidity build-up and condensation inside the chassis.
- This feature further enhances the reliability of the system in humid, high-pressure, and temperature-fluctuating environments.

Product Specification

- Intel® Celeron® Processor J3455
- 15" / 21.5" Stainless Steel Chassis With IP-66&IP-69K
- Projective Capacitive Multi-Touch Up To 10 Points
- Onboard 4GB DDR3L / 64GB mSATA

- Support Windows 10 / Linux / Android 8.1
- Rich and Swappable I/O, 1 x LAN, 2 x USB, 1 x COM, 1 x DC in by M12 connector With Waterproof Cover And Chain
- 1 x Vent Valve, 1 x Power Button
- Optional WiFi/BT with waterproof antenna



Stainless &
IP66/69K



M12 connector



DC in +12~+24V



Air pressure relief
valve



Performance &
Flexibility



Product Specification

- 13th Generation Intel® Core™ 3/5/7 Processors
- 15" / 21.5" Stainless Steel Chassis With IP-66&IP-69K
- Projective Capacitive Multi-Touch Up To 10 Points
- Onboard 8GB DDR5 / 128GB SSD
- Support Windows 10/11, Linux
- Rich and Swappable I/O, 1 x LAN, 2 x USB, 1 x COM, 1 x DC in by M12 connector With Waterproof Cover And Chain
- 1 x Vent Valve, 1 x Power Button
- Optional WiFi/BT with waterproof antenna



Stainless &
IP66/69K



M12 connector



DC in +19~24V



Air pressure relief
valve



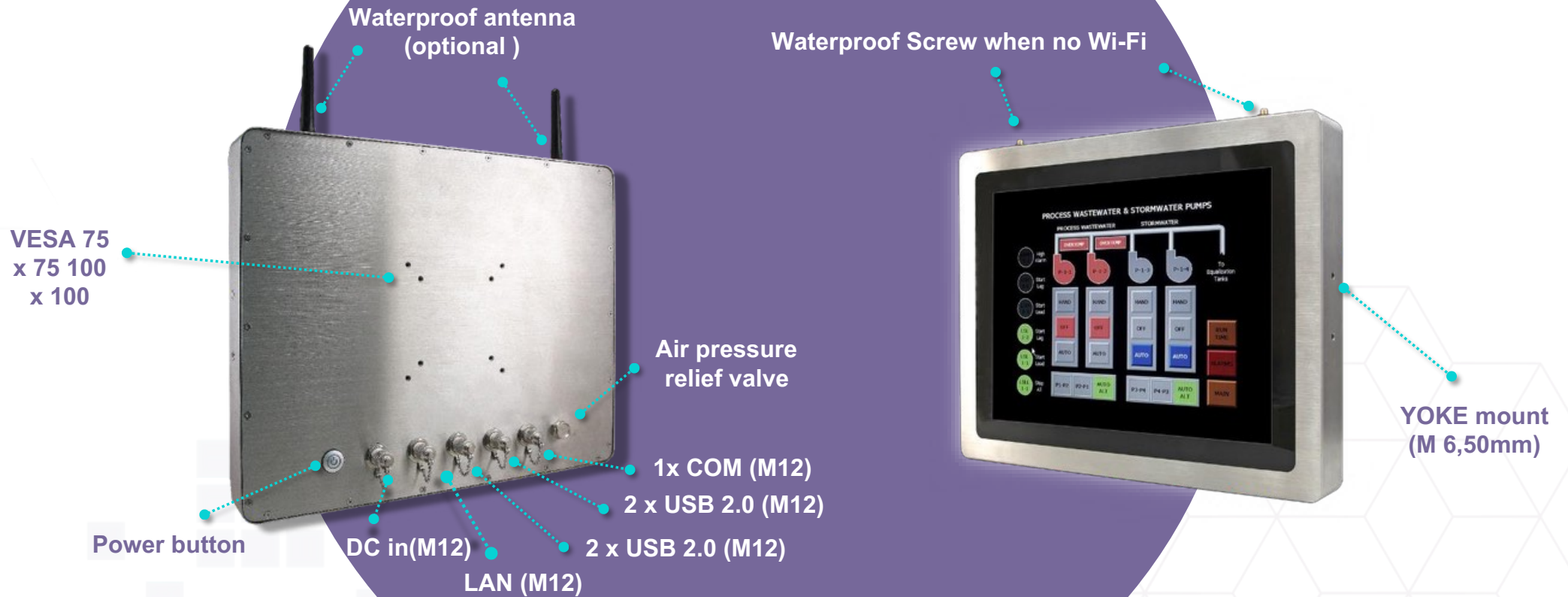
Performance &
Flexibility



CRYSTAL DISPLAY SYSTEMS LTD

STANLESS STEEL PANEL PCs

SPC-15xx



CRYSTAL DISPLAY SYSTEMS LTD

STAINLESS STEEL PANEL PCs

SPC-21xx

VESA
100 x 100

Waterproof Screw when no Wi-Fi

Waterproof antenna
(optional)

Air pressure
relief valve

Power button

DC in (M12)

LAN(M12)

2)

2 x USB 2.0
(M12)

2 x USB 2.0 (M12)

1 x COM (M12)

YOKE
mount
(M6,50mm)

CRYSTAL DISPLAY SYSTEMS LTD

STAINLESS STEEL PANEL PCs

Target Market



Industrial



- **Stainless Steel Enclosure:** SUS304 food- grade stainless steel enclosure, antibacterial and easy to clean.
- **IP66/IP69K:** Full IP66/IP69K protection with M12 waterproof I/O connectors, supports high-pressure washdown.
- **Air pressure relief valve:** Prevents internal condensation, extending system lifespan.
- **Fanless design:** Eliminates dust accumulation, ensuring a zero-contamination environment.



Pharmaceuticals



- **Stainless Steel Enclosure:** Constructed with food-grade SUS304 stainless steel, resistant to chemical disinfectants and alcohol-based cleaning agents.
- **Fanless design:** minimizes airborne dust circulation, ideal for static cleanroom environments.
- **TPM 2.0:** Ensures protection of confidential production data.
- **Air pressure relief valve:** Prevents condensation caused by humidity changes, keeping the screen clear and the internal components dry.



Healthcare



- **Multi-touch:** Supports multi-touch operation with medical gloves, ensuring precise input in clinical settings.
- **Fanless design:** Fanless and low-noise design, minimizing disturbance to patients and surgical environments.
- **Stainless Steel Enclosure:** Antibacterial SUS304 stainless steel housing with a flush touch panel for easy cleaning and disinfection.
- **IP66/IP69K:** Certified IP66/IP69K waterproof, allowing daily high-pressure washdown for hygiene compliance.



Chemicals



- **IP66/IP69K:** Fully sealed IP69K design with waterproof buttons, resistant to corrosion and dusty environments.
- **Air pressure relief valve:** Air pressure relief valve prevents condensation from entering internal circuitry.
- **WiFi/BT Modules:** Supports WiFi/BT modules with waterproof antennas, enabling reliable wireless monitoring.
- **Wide operating temperature:** Wide operating temperature range from -10°C to 50 C, suitable for harsh industrial conditions.

Application Story

FOOD PROCESSING PLANT

The SUS 304 food-grade enclosure, combined with IP66/IP69K certification and M12 waterproof connectors, withstands daily high-pressure washdowns with hot water and disinfectants. The air pressure relief valve effectively prevents internal condensation, keeping the screen clear. Its fanless design eliminates dust build-up, supporting a contamination-free work zone.

REQUIREMENT

- Antibacterial and easy to clean
- High pressure washdown
- Zero contamination requirement

SOLUTION

- SUS 304 Stainless Steel enclosure
- Full IP66/IP69K protection
- M12 waterproof I/O connectors
- Fan less design



Application Story

RUGGEDIZED SMART LAB

The lab required terminals capable of handling temperature swings, corrosive agents, and reliable wireless monitoring to prevent experimental delays and data loss. SPC-xx42 featuring stainless steel enclosures and flat touch surfaces that enable thorough disinfection and reduce bacterial retention. The system supports multi-touch input with medical gloves, enhancing accuracy and usability during procedures.

REQUIREMENT

- Humidity changes & wide operating temperature
- Real-time data transmission
- Easy cleaning and disinfection

SOLUTION

- Air pressure relief valve
- -10°C to 50°C, suitable for harsh industrial conditions
- Supports Wi-Fi/BT modules with waterproof antennas
- Antibacterial stainless steel housing with flat touch panel IP66/IP69K allowing daily high-pressure washdown for hygiene compliance



Application Story

CHEMICAL LAB

SPC-xx42 with SUS 304 & IP69K-rated, offering full protection against dust, corrosion, and high-pressure washdowns. The built-in air pressure relief valve effectively prevented internal condensation, protecting sensitive circuitry. By integrating Wi-Fi/BT modules and waterproof antennas, the system enabled real-time wireless data transmission and alerting. It maintained stable performance across -10°C to 50°C, significantly improving production reliability and reducing downtime.

REQUIREMENT

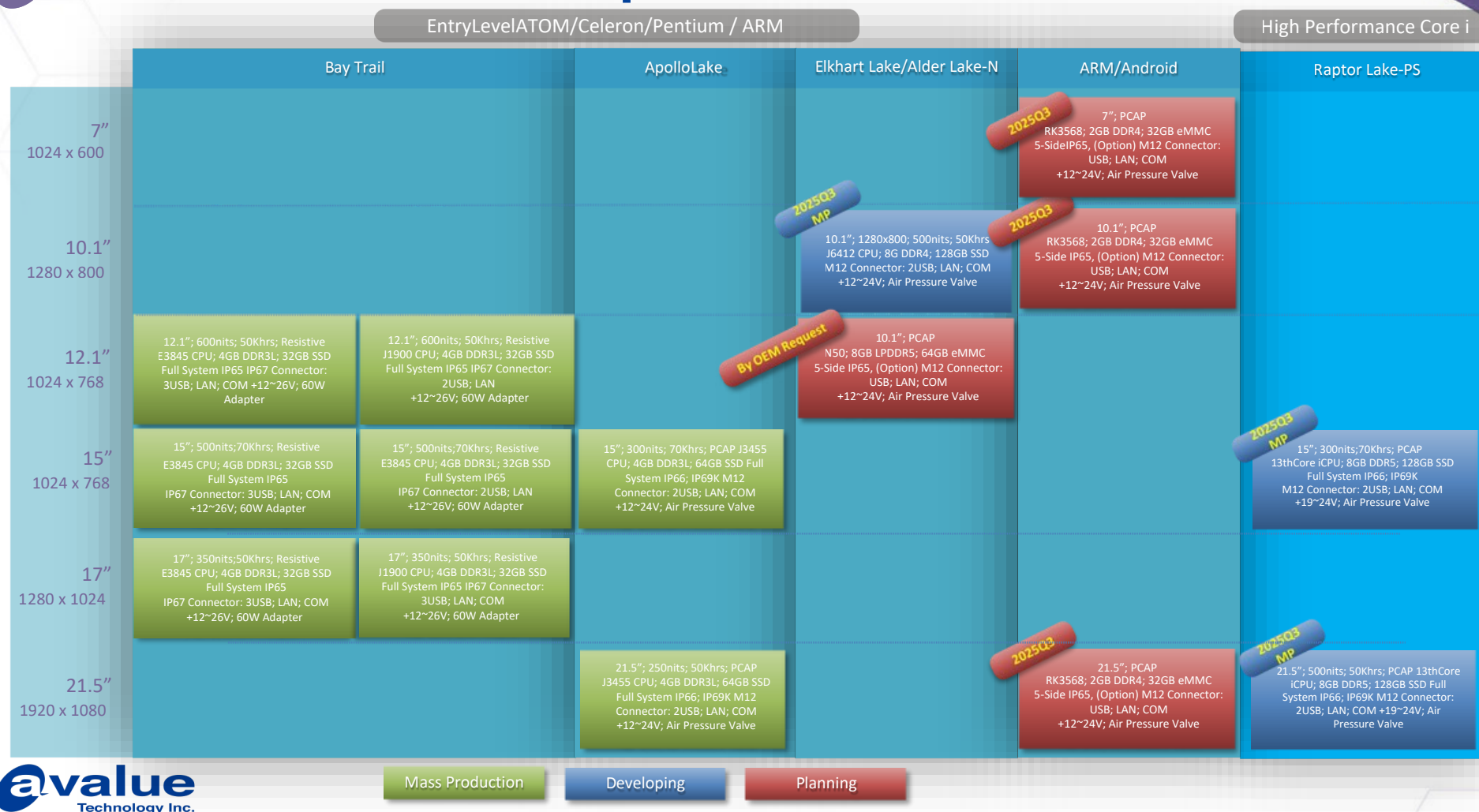
- Resistant to corrosion and dusty environments
- Humidity changes & wide operating temperature
- Enabling reliable wireless monitoring

SOLUTION

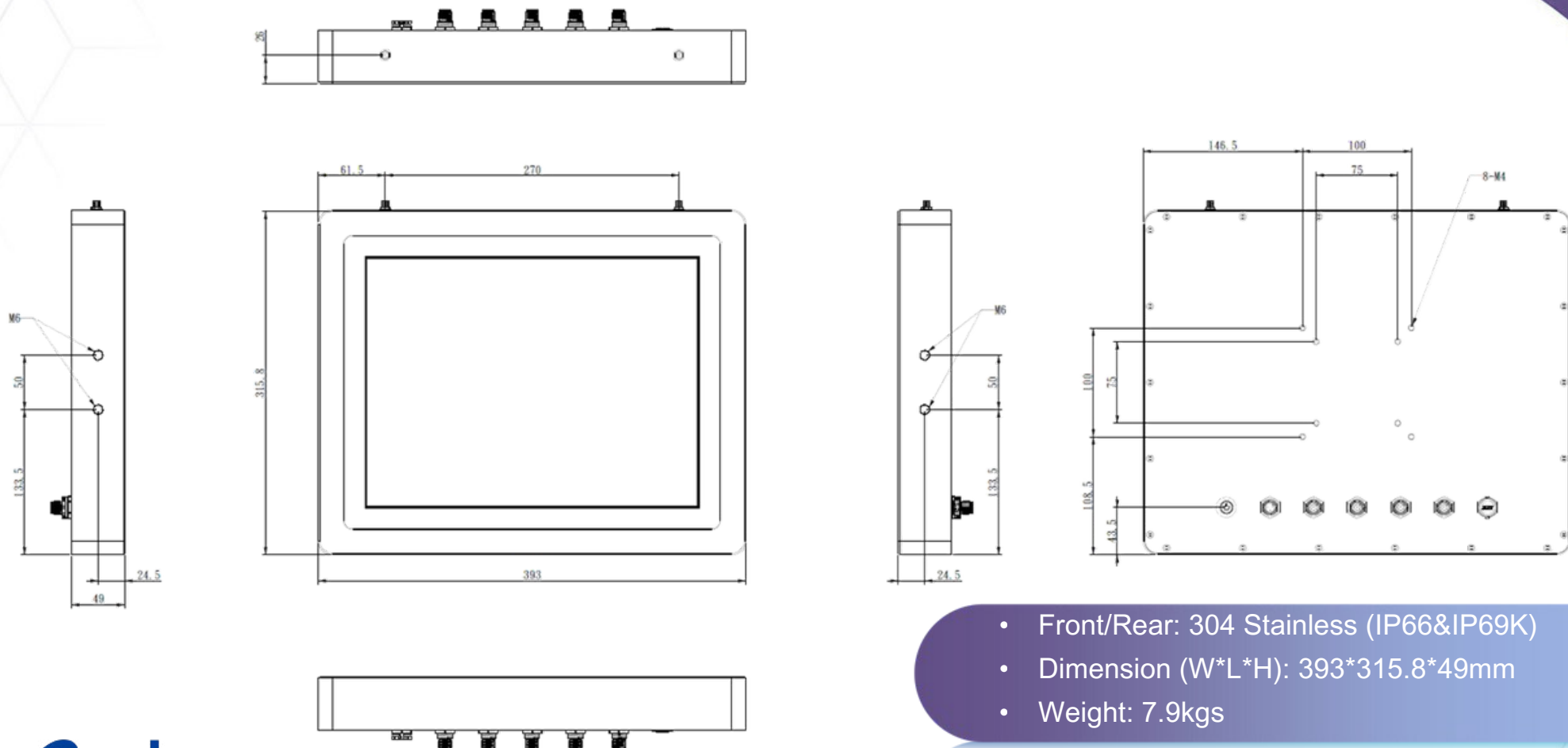
- SUS 304 & Full IP66/IP69K
- Air pressure relief valve -10°C to 50°C, suitable for harsh industrial conditions
- Supports Wi-Fi/BT modules with waterproof antennas



SPC Series Roadmap

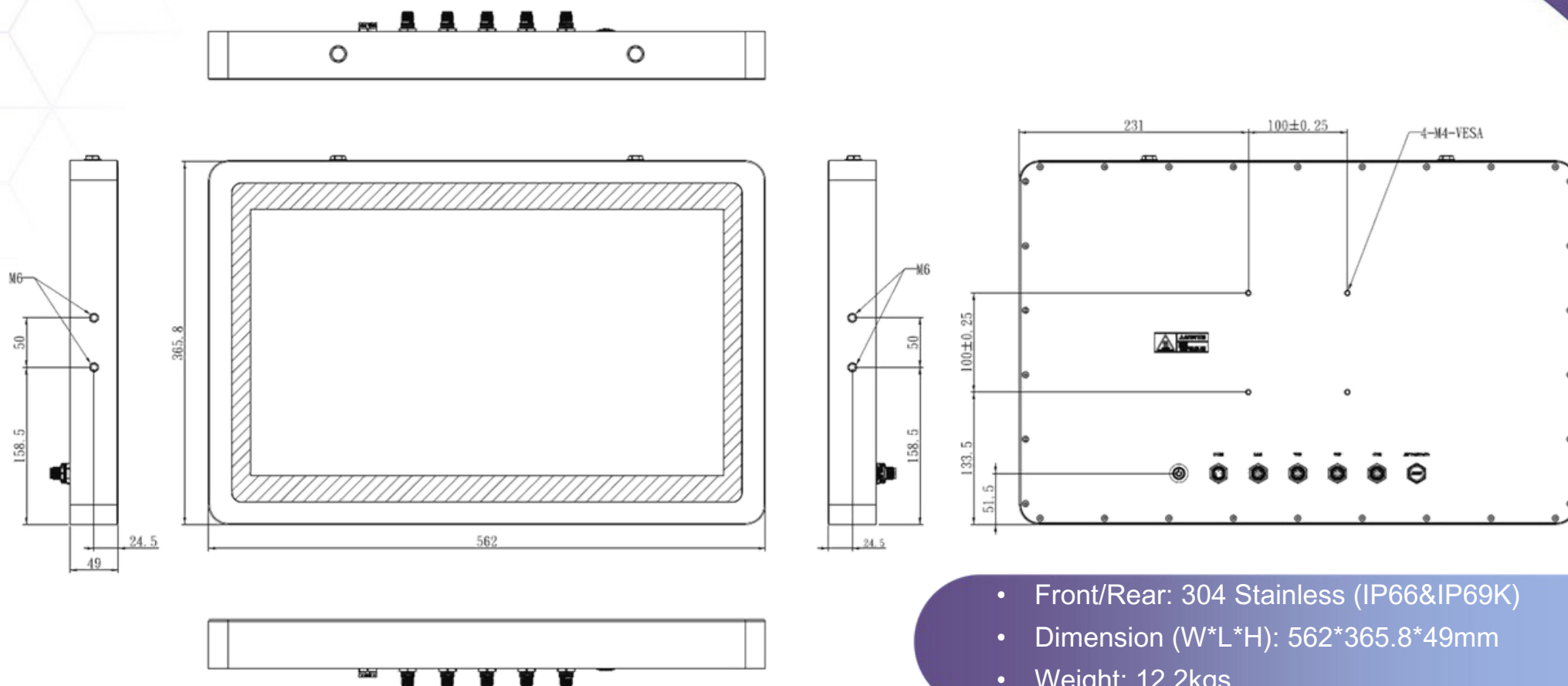


Physical Overview (SPC-15xx)

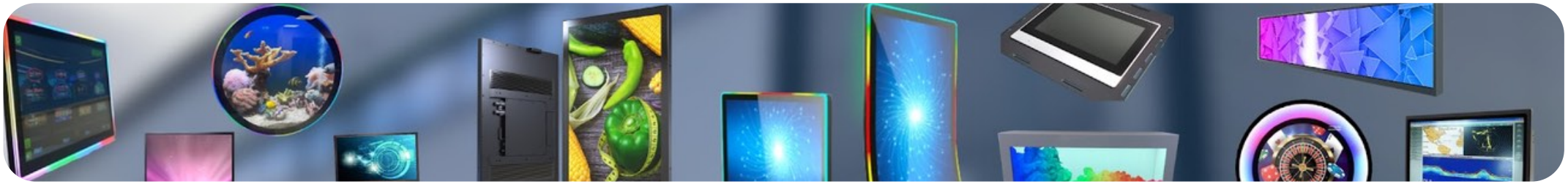


- Front/Rear: 304 Stainless (IP66&IP69K)
- Dimension (W*L*H): 393*315.8*49mm
- Weight: 7.9kgs

Physical Overview (SPC-21xx)



- Front/Rear: 304 Stainless (IP66&IP69K)
- Dimension (W*L*H): 562*365.8*49mm
- Weight: 12.2kgs



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CDS Display Corner - 15 inch Yoke Industrial Monitor

Crystal Display Systems walk you through their 15 inch Yoke Industrial Monitor



Need any additional information?

Our team is always available to help you with pricing details, technical support, or any additional information you may need. Please don't hesitate to reach out.



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