SIO-300-ADL

IP66/IP69K Stainless Steel Industrial Panel PC

POWER-EFFICIENT HMI SOLUTION FOR HYGIENIC INDUSTRIAL ENVIRONMENTS

WASHDOWN STAINLESS STEEL PANEL PC

Premio delivers a stainless steel panel PC engineered for hygienic environments, combining high-performance HMI computing with durable, sealed construction.

Industrial Longevity

Hygienic, Sealed Design

High-Performance Computing

Flexible Industrial Integration

Extreme
Washdown
Reliability

Intel® N97 IP66/IP69K Stainless Steel Industrial Panel PC

The SIO-300-ADL Series is powered by the Intel® Processor N97, a next-generation processor built on Intel's 12th Gen Alder Lake-N efficiency-core architecture. Designed to balance performance and power efficiency, the N97 delivers responsive computing for modern industrial HMI and edge control applications while maintaining low thermal output—ideal for fanless, sealed stainless steel systems.

Featuring four efficiency cores with boost frequencies up to 3.60 GHz, the platform delivers reliable processing capability for industrial visualization and control tasks. DDR5 memory support improves data throughput and overall system responsiveness for modern HMI applications.

This combination of high-performance efficiency cores, low power consumption, and modern memory architecture makes the SIO-300-ADL an excellent fit for always-on industrial HMI applications in hygienic environments, where performance, stability, and energy efficiency are equally critical.
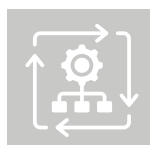
Key Features

- Intel® Processor N97 (Alder Lake-N), up to 3.6 GHz
- Fanless stainless steel SUS316 enclosure
- Full system IP66 / IP69K washdown protection
- DDR5 memory support up to 16GB
- Triple 2.5GbE LAN with M12 connectors

- M.2 expansion with 5G-ready cellular support
- Optical bonding with 7H scratch-resistant touch glass
- Wide input AC power (110–240V)

Agricultural Process Visualization

Mining Equipment Supervision

Livestock Facility Automation

Food & Beverage Production Lines

Pharmaceutical Manufacturing Operations

Cleanroom Environmental Oversight
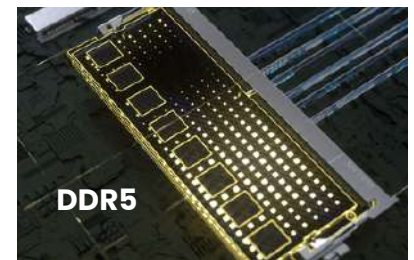
Intel® N97 Processor

The SIO-300-ADL Series utilizes the Intel® Processor N97, based on Intel's Alder Lake-N architecture, delivering strong efficiency performance with low power consumption for industrial computing. This efficiency-focused CPU design supports continuous fanless operation, providing stable performance while minimizing energy usage in hygienic industrial environments.

Intel® Processor N97

Key Features

- Intel® Processor N97 (Alder Lake-N)
- Four efficiency cores with up to 3.60 GHz boost frequency
- Low-power design optimized for fanless operation
- DDR5 memory support for improved performance and scalability

DDR5

Full IP66/IP69K Protection

IP69K

Reinforced for Aggressive Washdowns

Fully IP66/IP69K rated, the design protects against dust ingress and aggressive washdowns. IP66 resists strong water jets and airborne particulates, while IP69K withstands close-range, high-pressure, high-temperature water or steam jets up to 80ºC (176ºF) at 100 bar (1450 PSI), supporting reliable operation and hygiene compliance in sanitation-critical environments such as food and beverage processing.

Scalable Storage Expansion

Supports M.2 B-key NVMe/SATA SSD storage for primary operation. In addition, the 21.5" and 23.8" models provide an optional 2.5-inch SATA SSD bracket to support secondary storage, enabling local data logging and industrial application storage.
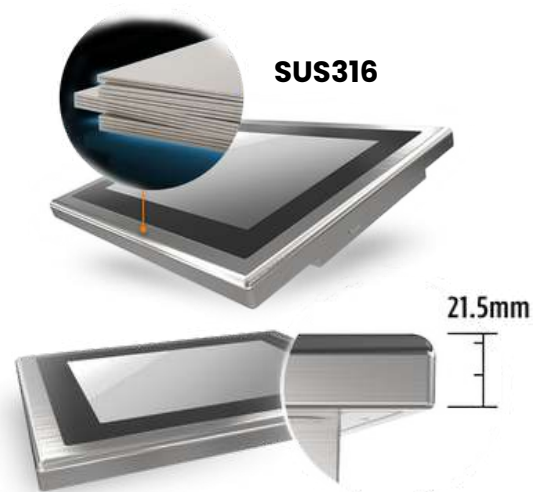
SSD
2.5" SATA

Stainless Steel Construction for Industrial Durability

The stainless steel enclosure provides structural durability and corrosion resistance suited for harsh industrial and hygienic environments. Constructed from SUS316 (Type 316) stainless steel, it delivers long-term reliability and durability for the SIO Series.

- **Corrosion Resistance:** Staving off the destructive effects of many corrosive substances.
- **Lightweight Strength:** Ideal strength-to-weight balance, forgoing unnecessary material heft.
- **Wide Temperature Threshold:** Extreme heat and cold do not diminish the stainless steel's formidable strength.
- **Hygienic Simplicity**: Low-maintenance, nonabsorbent and withstands intense cleaning.
- **Sleek Presentation:** Adds modern sophistication and a smart appearance to Smart industrial systems.

SUS316

21.5mm

No optical bonding

Optical bonding

Touch Panel

Air Gap

LCD Panel

Touch Panel

Resin Layer

LCD Panel

Optical Bonding for Clear Visibility

Optical bonding eliminates the air gap between the LCD and touch panel, significantly reducing reflections to improve display clarity while preventing condensation in humid or washdown environments.

Resilient, Responsive Touch Technologies

Single-touch resistive and multi-touch PCAP touchscreens support precise, gloved operation for industrial environments, with 7H hardened glass for PCAP touch and 3H hardened glass for resistive touch, providing scratch resistance. Optional high-brightness displays improve visibility in bright conditions.
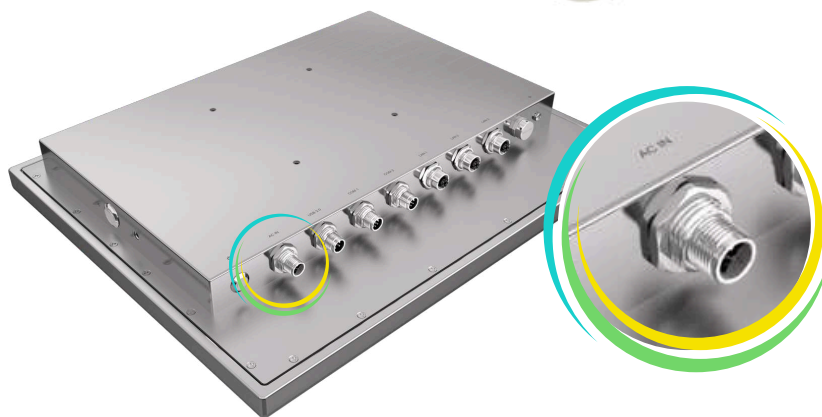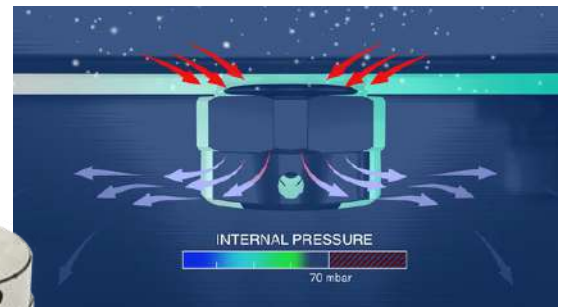
Scalable M.2 Expansion for Wireless Connectivity

The SIO-300-ADL Series supports cellular connectivity via an M.2 B-key expansion slot on the 21.5" and 23.8" models, enabling 4G LTE or 5G integration, and also supports Wi-Fi 6E for high-speed wireless networking.

Waterproof M12 Connectors, Straight AC-in Power, and Pressure Valve

The SIO-300-ADL Series uses industrial-grade M12 connectors to provide secure, sealed power and I/O connections during washdown operations, while an integrated stainless steel pressure valve equalizes internal pressure to reduce condensation and maintain enclosure integrity.

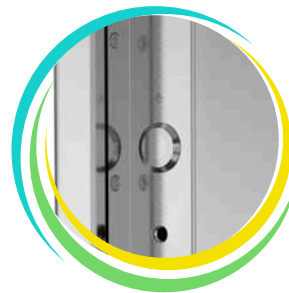INTERNAL PRESSURE

70 mbar

Direct AC power input

Direct 110–240V AC power input simplifies installation in in-line factory systems while preserving a sealed, industrial-grade design for hygienic environments.

Sustained Operation During Washdowns

Native touchscreen enable/disable controls prevent accidental touch activation during washdowns while supporting continuous operation in hygienic industrial environments.

We Design,
Manufacture, and
Service Customers
Around the World

CHICAGO

CALIFORNIA (HQ)

TAIWAN (HQ)

MALAYSIA

SIO-300-ADL Series Washdown Stainless Steel Panel PC.

Model	SIO-315-ADL	SIO-W315-ADL	SIO-W321-ADL	SIO-W324-ADL
LCD Size / Aspect	15.0" (4:3)	15.6" (16:9)	21.5" (16:9)	23.8" (16:9)
Dimensions (WxHxD)	385 × 310 × 49.5 mm	425 × 276 × 49.5 mm	588.5 × 380 × 52.8 mm	623 × 417 × 54 mm
Touch Technology	Projected Capacitive (2-point, glove mode)			
Rugged Protection	Full System IP66 / IP69K , 7H Glass Hardness, IK07 Impact Protection			
CPU	Intel® Processor N97 (4 cores, up to 3.60 GHz, 12W)			
Memory	1× DDR5 SO-DIMM, up to 16 GB			
Storage	1× M.2 B-Key 2242 (NVMe / SATA)		1x M.2 B key 2242/3042 NVMe/SATA (optional 4G/5G) 1x 2.5" SATA SSD (optional)	
Expansion	M.2 E-Key (optional Wi-Fi 6E)		M.2 E-Key + M.2 B-Key (optional 4G/5G cellular)	
I/O Ports	3x 2.5GbE LAN (M12 X-Code), 2x COM Ports (RS-232/422/485, M12 A-Code), 1x M12 A-Code (2x USB 2.0), Power On/Off			
Wireless Antenna	Up to 2 external antennas		Up to 4 external antennas	
Power Input	110–240 V AC, M12 S-Code			
Operating Temp.	-10 ℃ to 50 ℃			
Construction	SUS316 Stainless Steel, Optical Bonding			
Certifications	CE, FCC Class A			
Mounting Options	VESA 100×100 / 200×100, Yoke (opt.)			

USA 918 Radecki Ct., City of Industry, CA 91748
TW 176 Jianyi Rd., Zhonghe Dist., New Taipei City

800.977.3646
886-2-7731-7888

sales@premioinc.com
premioinc.com