Maintain Hygiene and Cleanliness with Super-Rugged, Waterproof Panel Computers

For industries with strict hygiene standards, the IP69K-rated ADLINK Titan Panel Computer series is easily cleaned with common detergents and hot, high-pressure water.

When Hygiene and Waterproof Matter

Panel computers used in food and medicine production are expected to withstand contaminants and excessive moisture because they are regularly power washed and sanitized to maintain hygiene. In other industrial environments, like chemical plants, heavy industry, and transportation, panel computers must be waterproof to endure humid and wet factory environments or harsh outdoor conditions.

Rugged Computers

Ingress protection (IP) ratings enable OEMs, ODMs, and systems integrators to identify which panel computers can tolerate extreme environmental conditions. These rating standards, developed by the International Electrotechnical Commission (IEC), recommend procedures to test a product's resistance to dust, water, and chemicals, as well as high temperature, high pressure water.

The extremely stringent IP69K rating indicates a panel computer's enclosure is sufficiently sealed to protect against a high level of foreign particulates and liquids. Figure 1 lists some of the tests an IP69K-rated device must endure.The IP69K-rated ADLINK Titan Panel

80°C/176°F   1160-1450 PSI (80-100 bar)   Spray at 0°, 30°, 60°, 90° for 30 seconds each

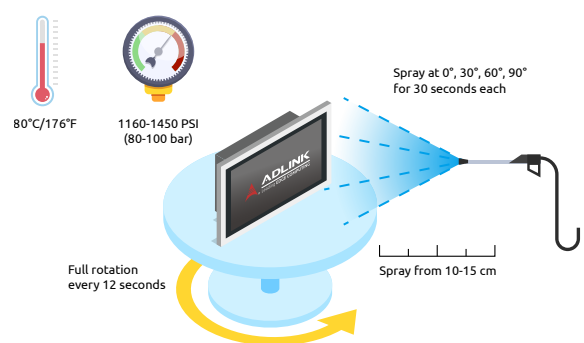Full rotation every 12 seconds   Spray from 10-15 cm

Figure 1. IP69K Test Procedures

Computer series delivers the highest level of protection with an enclosure capable of withstanding a powerful jet spray of 15 L/min (100 bar of pressure) of 80°C water from 10 cm away.

Key Waterproof Features

In addition to an IP69K-compliant chassis, the ADLINK Titan Panel Computer series offers the following waterproof features:

- M12 waterproof connectors and cables
- Corrosion-resistant 316L (V4A) stainless steel materials
- Flush front panel to prevent water residue after cleaning
- Resistance to oxidation and other chemical reactions

High Reliability

The ADLINK Titan Panel Computer series is designed for high reliability, supporting a 50,000 hours MTBF (mean time before failures) that can help minimize maintenance costs. Should there be any malfunction, a panel computer can be quickly replaced, especially since the panel's screw connectors cannot be mixed up during replacement.

Rugged Touchscreen

Capacitive glass touchscreens are susceptible to condensation and glass breakage, and thus are not well-suited for the humid and harsh environments found in many production plants. To avoid these issues, the ADLINK Titan Panel Computer series can be ordered with a resistive touch display that can also be operated while wearing gloves.

Mounting Systems

OEMs, ODMs, and systems integrators can choose one of the two mounting systems shown in Figure 2:

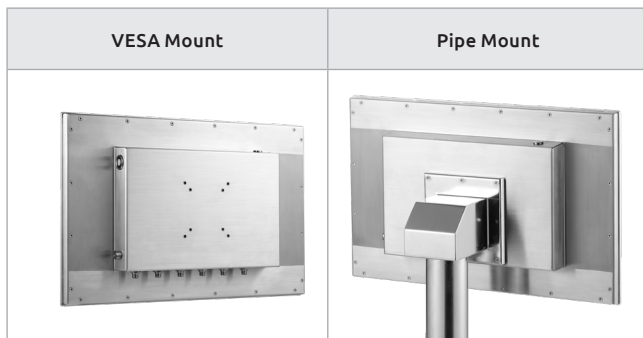| VESA Mount	Pipe Mount

Figure 2. ADLINK Titan Panel Computer Series Mounting Systems

- Video Electronics Standards Association (VESA) is a standard for mounting displays to a stand, wall, or pipe. This low-cost method is good for an OEM or ODM that is delivering a complete out-of-box solution.
- Pipe mounting system protects and organizes the cables running to a panel computer. This option allows systems integrators to run cables from various subsystems in a visually appealing way. In addition, customizable function modules, such as waterproof connectors, lockable HMI or USB ports, computing systems (e.g., GPUs, FPGAs), or storage (e.g., mSATA or microSD slots), may be added to support feature expansion.

Feature Set in Detail

Table 1 lists the key features of the ADLINK Titan Panel Computer series. The modular design of these panel computers also allows for customizable I/O and functionality. Contact your ADLINK representative for more information.

Key Benefit	– Fully ruggedized
Display Sizes	– 15.6/21.5/23.8
Computer Platform	– Intel Atom® x7-E3950 processor – 4/8 GB RAM, 128 GB SSD
Touchscreen	– PCAP/Resistive
Mounting Systems	– VESA mount kit – Pipe mount kit
Chassis	– Corrosion-resistant 316L (V4A) stainless steel
Ingress Protection	– IP69K/IP65 full system – M12 waterproof connectors and cables
Power Supply	– 100V-220V PSU in chassis

Table 1. ADLINK Titan Panel Computer Series Feature Set

Feature-Rich Panel Computer

The Titan Panel Computer series is an ideal fit for food and beverage, pharmaceutical, automotive, and steel and metal industries. The gap-free enclosure simplifies daily cleaning procedures; the mounting system options ease installation; and a high MTBF reduces maintenance costs.

To learn more about the ADLINK Titan Panel Computer series, please visit the ADLINK website at https://www.adlinktech.com/Products/Panel_PCs_Monitors/IndustrialPanelComputers/Titan-AL?lang=en.