

IP65 Touch Monitors for Machine Automation



Industry Background

Considering a dusty environment like production lines in pharmaceutical or food & beverage industry: Particulates created when the production is in motion. A dust hood or dust extractors can help with decrease the amount of particulate in the air, but dust will still be able to penetrate improperly into the HMI screen and cause the reliability concerns to operators. In addition, protection from liquid is vitally important in such application as well. The production machines need to be cleaned regularly, and therefore machinery must be rated to withstand whatever washdown process is required.

Requirements

To decrease the possibility that particulates and moisture/water causing problems in the harsh production environment, IP65 water & dust proof designs can eliminate downtime working in high humidity and dusty environment. An industrial grade monitor with IP65 rating can make sure operators access the production equipment and machines without any issue causing by dust and water. IP Rating is the level of protection provided by an enclosure against solid objects, liquids, and mechanical impacts. An IP Rating usually has two numbers: the first number stands for the Protection from solid objects or materials, and the second one for protection from liquids.

Protection Against Solids	Protection Against Liquids
0 No Protection	0 No Protection
1 Protects against solid objects > 50mm	1 Protects against vertically falling water drops
2 Protects against solid objects > 12.5mm	2 Protects against vertically falling water drops when enclosure is tilted up to 15 degrees
3 Protects against solid objects > 2.5mm	3 Protects against spraying water 60 degrees from vertical
4 Protects against solid objects > 1mm	4 Protects against slashing water from any direction
5 Dust protected (Prevents ingress of dust sufficient to cause harm)	5 Protects against water from any angle
6 Dust-tight	

IP65 monitor offers complete protection against particles, and a good level of protection against water. On top of avoiding the contamination from the dust and water into the screen/display, it is also important that the surface can be cleaned easily when operators need to access to the display. With the hardness and the anti-smudge coating (optional) of the surface of the cover glass or touch screens, the cleaning is an easy job. When the interaction with the machines through the screen is required, Resistive or Projective Capacity touch solution (optional) provides quick touch response and is also responsive to gloves.

Why Advantech IDS-3300 Series?

Designed with IP65 at the front side, IDS-3300 series monitor is a proven solution for the displays embedded into machines/systems in the dusty manufacturing sites or wash down environments. With the specific mechanical design sealing the gaps, the screen is protected from water, dust, oil or grease. Not to mention the hardness of the surface treatment, users can simply wipe out the dust or water on the screen when necessary.

IDS-3300 series also comes with the touch screen options: resistive and projective capacity, depending on the demand. Such option also makes the products a perfect screen for HMI. The series comes with various signal interface, including VGA / DVI and HDMI, provides the flexibility to connect to computers. Special panel mounting design with clampers and also the standard VESA mount at the back also give different options to embed the monitors into systems.

Benefit:

- Front IP65 design prevents damage to the screen by ingress of liquids and allows light or heavy wash down
- Durable screen protection without the risk of contamination of your production line in the event of breakage
- Universal VESA mount and panel mounting method providing the ability to mount monitors to different systems

Recommended Products:



Size	10.4"	15"	19"
Model	IDS-3310	IDS-3315	IDS-3319
Resolution	1024 x 768, XGA	1024 x 768, XGA	1280 x 1024, SXGA
Brightness	500 cd/m ²	500 cd/m ²	350 cd/m ²
Viewing Angle(H/V°)	176 / 176	176 / 176	170 / 160
Contrast Ratio	1000 : 1	2500 : 1	1000 : 1
Touchscreen	Resistive / Projective capacity	Resistive / Projective capacity	Resistive / Projective capacity
Signal Interface	VGA/DVI/HDMI	VGA/DVI/HDMI	VGA/DVI/HDMI
Backlight Life(hrs)	50,000	50,000	50,000
Operating Temperature	-20 ~ 60° C	-20 ~ 60° C	-20 ~ 60° C