



Survival of the Fittest

Dahua Anti-corrosion Product



Strong Corrosion
Resistance



High Protection
Measures



Long Service Life



Complete Industry
Certification

Background

In coastal areas such as coastlines, ports and islands, metal products are prone to rust due to humidity and high salinity concentration in the air. The external paint of fences and other metal objects in these sites peels off easily, which affects their appearance and service life.

Without anti-corrosion protection, the long-term usage of ordinary video surveillance system in coastal areas can affect the surveillance image output and equipment stability.



Dahua Anti-corrosion Technology

Anti-corrosion Coating

Dahua incorporates high anti-corrosion aluminum with high anti-corrosion coating, combining two existing anti-corrosion solutions in the industry: structure change and protection cover.

Advantages:

- Improves the anti-corrosion performance of metal parts
- Tight coating and strong impact resistance
- Double protection



High-performance
Anti-corrosion Coating



High-performance
Anti-corrosion Aluminum



316L Stainless Steel

316L Stainless Steel

The high anti-corrosion technology of Dahua stainless steel is made of SUS 316L stainless steel. 316L stainless steel belongs to 300 series Fe-Cr-Ni alloy austenitic stainless steel. Due to its high content of chromium (16%-18%), nickel and extremely low carbon content ($\leq 0.03\%$), it is considered as one of the most corrosion-resistant stainless steels.

Advantages:

- Elegant and beautiful appearance
- Good mechanical properties
- Excellent corrosion resistance

Anti-corrosion Performance Testing

Purpose

Verify product's resistance to salt spray (NaCl) corrosion.

Environment



35°C, NaCl concentration: 5% (lasting for 2h)
40°C, 93% RH (lasting 166h)
The two test environments alternately cycled 4 times, for a total of 28 testing days.



Temperature Range: 5°C - 55°C
Relative-Humidity Range: 25% - 95%
Temperature Uniformity: $\leq \pm 2^\circ\text{C}$
Temperature Constancy: $\leq \pm 0.5^\circ\text{C}$
Spraying Method: Cycle

Experiment

	Easily corroded	Anti-corrosion	
			Week 1
			Week 2
			Week 3
			Week 4

Dome appearance: Corrosion is concentrated in the screw holes. As the salt spray time increases, wrinkles at the screw holes gradually spread to the fuselage, even cause cracks.

	Easily corroded	Anti-corrosion	
			Week 1
			Week 2
			Week 3
			Week 4

Bullet appearance: At first, there were corrosion marks at the connection between the fuselage and the junction box. As the salt spray time increased, the SD back cover of the fuselage started to wrinkle, and the junction box became severely damaged.

Application Scenarios



Port



Coastal Road



Island



Coastal Airport



Coastline



Bridge

Recommended Products

PSDW8 Series



- Supports 360-degree panoramic view
- Starlight technology
- Smart H.265+/H.264+ triple-stream encoding
- IR distance up to 400 m
- Smart tracking, Tripwire, Intrusion
- Supports crowd map and vehicle density
- Anti-corrosion Material: Anti-corrosion Coating



PFB710W-ATC



PFA153A

7442/7842/71242 Series; 5242/5442/5842 Series



PFA155A

- 1/1.8" CMOS
- 7 Series: 12MP@25/30fps; 8MP@25/30fps; 4MP@50/60fps
- 5 Series: 8MP@25/30fps; 4MP@25/30fps; 2MP@50/60fps
- IP67, IK10, ePoE, Heater
- Anti-corrosion Material: Anti-corrosion Coating
- Anti-corrosion Certification: NEMA 4X/ EN60950-22

7442/7842/71242 Series; 5242/5442/5842 Series



PFB211WA



PFB300CA+PFA101A



PFA152A-E

- 1/1.8" CMOS
- 7 Series: 12MP@25/30fps; 8MP@25/30fps; 4MP@50/60fps
- 5 Series: 8MP@25/30fps; 4MP@25/30fps; 2MP@50/60fps
- IP67, IK10, ePoE, Heater
- Anti-corrosion Material: Anti-corrosion Coating
- Anti-corrosion Certification: NEMA 4X/ EN60950-22

SD8A Series



PFB306WA



DH-PFA140A

- Powerful 40X optical zoom
- 1/1.8" CMOS
- IR distance up to 500m
- Smart wiper
- IP67
- Anti-corrosion Coating
- 1,000 hours of neutral salt spray requirement

SD5A Series



PFB305WA



DH-PFA120A

- Powerful 45X optical zoom
- 1/2.8" CMOS
- IR distance up to 150m
- Invisible Lens Design
- Anti-corrosion Coating
- Anti-corrosion Certification: EN60950-22
- IP67, IK10

Recommended Products

PTZ19 Series



PFB731W



PFA153A

- Powerful 45X optical zoom
- 1/2.8" CMOS
- IR distance up to 350m
- Tilt Range: 0°-360° endless
- IP68
- Anti-corrosion Coating
- Anti-corrosion
- Certification: NEMA 4X

SDZW2000T-SL



DH-PFB733W-SL



DH-HB1000

- 3.6mm / 6mm
- IR distance up to 30m
- 316 Stainless Steel
- Anti-corrosion
- Certification: NEMA 4X

SDZW2030U-SL



DH-ZAS04



DH-EXB109-SL



DH-GD1000 (1M)



DH-ZAZ100W

- Powerful 30X optical zoom
- 1/2.8" CMOS
- IR distance up to 100m
- 316 Stainless Steel
- Anti-corrosion
- Certification: NEMA 4X

SD60230U-HNI-SL



DH-PFB303W-SL



DH-ZAS04



PFA120-SL

- Powerful 30X optical zoom
- 1/2.8" CMOS
- IP68, IK10
- 316 Stainless Steel
- Anti-corrosion
- Certification: NEMA 4X

