Weather Resistant Fans for harsh environments

WITH DUST PROOF AND WATER PROOF PROTECTION



Rugged performance for indoor and outdoor use

Pelonis Technologies introduces new weather resistant fans for harsh environments, including dust-proof and water-proof models that meet the most demanding application requirements.

PTI's weather resistant fans are designed to perform in environments subject to a wide variety of dust, moisture and direct water exposure.

Proprietary conformal coating technology is environmentally friendly, has low friction characteristics, and is corrosion resistant. Various levels of coating ensure fan protection from dust, water exposure, and water immersion. For maximum protection, each fan undergoes a stringent vacuum sealed process that enables operation while completely submersed under water.

PTI's family of weather resistant fans can be used in a wide variety of applications including emergency vehicles, military and mobile units, medical systems, field and ground support equipment, marine products, security cameras, control equipment, and indoor/outdoor cooling applications where dirt, dust and high humidity conditions exist.

- US Military Material Certification
 MIL-1-46058C
- NASA Material Certification
- USP XXII Non-toxic Certification
- UL94V-0 Fire Safety Certification



Innovation in Motion www.pelonistechnologies.com

Weather Resistant Process

PTI's weather resistant process includes multi-level conformal coating of the fan PC board, frame and motor. The material used exhibits good surface finish, high electrical strength, good thermal conductivity, and low exotherm and low cure shrinkage. Coating adhesion is excellent and the semiflexible nature allows thermal expansion without cured stress.

Pelonis Technologies' weather resistant fans can also be fitted with corrosion resistant guards that provide additional protection from particle obstruction.

Coating Characteristics

- Low friction
- Corrosion resistant
- Non-toxic
- · Chemical resistant
- · Water resistant
- · Low shrinkage
- High adhesion
- High insulation
- Flame retardant to UL94V-0
- · Zero stress surface sensitivity
- Fast & high throughput
- · Good thermal conductivity
- · RoHS compliant



IP rated weather resistant fans include AC and DC voltages from the smallest to the largest sizes and suit the most demanding applications for indoor or outdoor use.



Maximum IP Protection

IP (Ingress Protection) codes define how well an enclosure protects against the external environment. As the number gets higher, the protection gets better (e.g. IP54, IP55, IP56, etc.)

The first digit defines the protection level against "solids", the second against "liquids". Both digits should be specified to define an enclosure.

For the first digit:	
0	No protection
1	Protected against objects greater than 50mm diameter
2	Protected against objects greater than 12mm diameter
3	Protected against objects greater than 2.5mm diameter
4	Protected against objects greater than 1.0mm diameter
5	Dust protected
6	Dust tight

For the second digit:	
0	No protection
1	Protected against dripping water (i.e. vertical plane)
2	Protected against dripping water up to 15 degree angle
3	Protected against spraying water
4	Protected against splashing water
5	Protected against water jets
6	Protected against heavy seas
7	Protected against effects of immersion
8	Protected against submersion

To specify an IP rated fan, or for additional information regarding our weather resistant technology, contact us for assistance.

