

DESIGNING FOR DURABILITY

10 Essential Questions for Reliable Electronics in Harsh Environments



Together, improving life

1. What are the temperature extremes and how quickly will they change?
Fluctuations cause pressure differentials—it's critical to vent properly.

2. Is it in contact or exposed to salt air?
Corrosive environments demand durable materials that stand up long-term.

3. Would it be exposed to a rainy or wet environment?
Water ingress is one of the most common failure points.

4. Is the enclosure exposed to cleaning chemicals or high-pressure washdowns?
You may need IP69K protection and/or chemical-resistant materials.

5. Will it be exposed to a lot of dust or fine particulates?
Choose venting and sealing solutions that block intrusion while breathing.

6. How long is it expected to operate?
Don't settle for short-term solutions on long-lifecycle products.

7. Do the electronics inside require regular maintenance?
Select mounting types and vent forms that allow for easy service.

8. What are the cost considerations?
Balance performance with value by choosing the right vent form – adhesive, snap-in, screw-in or weldable.

9. Are there size or installation constraints?
We'll help you choose the best-fit venting and sealing format for tight spaces or complex geometries.

10. Are there Ingress Protection (IP) or UL rating requirements?
Ensure the enclosure can meet rating standards with venting in place.

