



## PowerID Label Lifetime

### Application Note



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## **Guidelines for Assessing PowerID Battery-Assisted, Passive Label Lifetime**

The following scenarios are provided to enable you to assess the lifetime of PowerID labels in your specific applications and environments:

### **Scenario A: Fair Environment (Best case)**

- A. Temperature range: 15 – 30 °C
- B. Exposure to RF radiation: 1 hour / day

Label life expectancy: 30 months

### **Scenario B: Hot Environment**

- A. Temperatures:
  - 1. Summer (7months): 8 hours a day @ 60°C and 16 hours a day @ 30°C
  - 2. Winter (5 months): 8 hours a day @ 40°C and 16 hours a day @ 20°C
- B. Exposure to RF radiation: 1 hour / day

Label life expectancy: 15 months

### **Scenario C: Cold Environment**

- A. Temperatures:
  - a. Summer (5months): 8 hours a day @ 40°C and 16 hours a day @ 20°C
  - b. Winter (5 months): 8 hours a day @ 20°C and 16 hours a day @ 10°C
- B. Exposure to RF radiation: 1 hour / day

Label life expectancy: 20 months

**Humidity:** PowerID label lifetime is not affected by operation in 5-95% non-condensing humidity.

Note:

The number of label interrogations during 1 hour / day of RF radiation does not influence label life expectancy

If you have different and / or more specific environmental conditions and would like to find out the expected label lifetime under these conditions, please contact [support@power-id.com](mailto:support@power-id.com)