

AQMesh battery lifespan estimation

The following estimations are based on the default sampling and transmission settings: 10 second gas sample rate, 15 minute average gas intervals, 30 second PM sampling within every minute, 60 minute transmission interval.

Internal lithium battery



NO, NO ₂ , O ₃ , CO, SO ₂	27.3 months
NO, NO ₂ , O ₃ , CO, SO ₂ and all PM	1.1 month
PM only	1.2 months

External high capacity lithium battery pack



NO, NO ₂ , O ₃ , CO, SO ₂	163.8 months
NO, NO ₂ , O ₃ , CO, SO ₂ and all PM	6.9 months
PM only	7 months

Internal rechargeable nickel metal hydride battery



NO, NO ₂ , O ₃ , CO, SO ₂	4.1 months
NO, NO ₂ , O ₃ , CO, SO ₂ and all PM	5.2 days
PM only	5.3 days

- The wind speed & direction sensor has very low power consumption and makes no difference to these estimations
- The heated inlet for PM monitoring has very high power consumption and will require external mains power
- The solar pack back-up battery (used when there is no sunlight to charge) will last approximately 10 days on standard PM settings and fastest gas settings