

Design for sustainability (DfS) scorecard



With our DfS scorecard, we drive sustainability improvement during the product development process through multiple product sustainability criteria divided into seven impact areas.

Milli-Q® IQ 7010/15 Purification Kit* (This purification kit is used with a Milli-Q® IQ 7010 or IQ 7015 Pure & Ultrapure Water Purification System)



Ultimate ultrapure and pure water solution - less electricity, more compact and mercury-free UV lamps

Impact areas

Results



MATERIALS

12% system size reduction but 7% weight increase due to more efficient but heavier power supply



SUPPLIERS & MANUFACTURING

No change compared to baseline product in consideration of our DfS criteria



PACKAGING

For purification cartridges' packaging, 30% weight and 31% volume reduction compared to initial design due to new protective insert design and twin box concept. System and purification cartridges' corrugated boxes with sustainable forestry certification. Protective inserts made of 100% bio-based polyethylene (PE) foam from sugar cane waste for the system and made of PE foam with a minimum of 50% recycled content for the E-POD® water remote dispensers.



ENERGY & EMISSIONS

18 to 22% reduction of system electricity consumption thanks to optimization of components and processes as well as an embedded improved "Lab Close" mode



WATER

2 to 7% water reduction during system use thanks to new periodic EDI rinsing
Reduction of water consumption during system quality control thanks to the implementation of a new impermeability test by air instead of by water



USABILITY & INNOVATION

Innovative UV oxidation lamps with mercury-free xenon excimer technology, and bactericidal lamps with mercury-free UVC LED technology.
Easy and quick cartridge replacement thanks to unique patented twist and lock technology



CIRCULAR ECONOMY

The system is designed to be easily maintainable and have a lower replacement frequency of purification consumables. Implementation of a drain cap enables to purge about 50% of the water from the purification cartridges, representing about 25% of the cartridges' total weight prior to disposal.

Baseline product: Milli-Q® Integral 10 and 15

* The characteristics presented in this DfS scorecard visual are the ones of the entire platform including the water purification system and the purification cartridges