

**Q: Why does the Technical Data recommend a 15-Minute Timeout on the Occupancy Sensor?**

A: The 15-minute delay will ensure that even in the lowest light conditions the unit has the ability to recharge on just a few uses of the restroom per a day. 15 minutes is for the lowest light levels, practically speaking a ten-minute timeout is acceptable.

**Q: Won't setting the lights to a 15-minute timeout defeat the purpose of the Occupancy Sensor?**

A: There is research available that shows that having timeouts in restrooms less than 10–15 min will actually cost more due to diminished lamp and lighting fixture life. Setting the lights to a shorter timeout will also increase user dissatisfaction with the process. This research was done for the EPA and published in 2000. <http://www.lrc.rpi.edu/resources/pdf/dorene2.pdf>

**Q: Why does ndite technology need to charge when it is installed?**

A: The charging ensures that the system reaches a point where it has cycles in reserve and can handle variations in the number of cycles per an hour. This initial charge results in reliable trouble free operation. This initial charge also allows the unit to retain power over several days of darkness and still be ready to use when a user enters the restroom.

**Q: Why doesn't ndite technology need batteries?**

A: The PV cells charge a proprietary power storage and management module. There are no batteries used in this system.

**Q: Why is there no battery backup, don't lithium batteries last a long time?**

A: Even the best lithium batteries still need to be replaced at some point. ndite technology is designed to eliminate this costly maintenance step and reduce the number of used batteries sent to landfills.

**Q: How long is ndite technology expected to last?**

A: ndite technology is expected to last at least 10 years with minimal maintenance. The photovoltaic cells are rated for 20 years of life in direct sunlight and are not expected to degrade in indoor environments. The power management module and sensors also have life expectancies of 15–20 years. The expected life of the valving varies based on water conditions and other environmental factors.

**Q: How much energy does the ndite technology produce?**

A: The ndite photovoltaic array generates between 6V and 10.8V of power depending on the light level. The system requires a minimum of 400 LUX or 37 foot candles to operate.

**Q: How many pounds of waste battery would be eliminated in the useful life of this equipment and what is the expect life cycle savings of ndite technology?**

A. Most modern battery powered systems use lithium batteries. Many of these batteries are changed once a year. These batteries are considered hazardous waste in many areas and require special disposal. The most popular lithium battery used in these systems is a Durcell DL223. The amount of wasted resources generated over the expected 15-year useful life of a lavatory is outlined below:

**2-Station Unit**

15 years x 2 Batteries = 30 Batteries @ \$10 = \$300  
15 Battery changes @ 2hrs of labor = 30 hrs x 50\$/hr = \$1500  
30 Batteries x 1.3oz = 39 oz or 2.43 lbs

**3-Station Unit**

15 years x 3 Batteries = 45 Batteries @ \$10 = \$450  
15 Battery changes @ 3hrs of labor = 45 hrs x 50\$/hr = \$2250  
45 Batteries x 1.3oz = 59 oz or 3.7 lbs

With alkaline batteries, usually AA cells, the waste is even greater:

**2-Station Unit**

15 x 2 Changes/yr = 30 Changes  
30 changes x (4 Batteries/ Station x 2 Stations) = 240 Batteries  
30 Battery Changes @ 2 hrs of labor = 60hrs x 50\$/hr = \$3000  
240 Batteries x .84oz = 201.6oz or 12.6 lbs

**3-Station Unit**

15 x 2 Changes/yr = 30 Changes  
30 changes x (4 Batteries/ Station x 3 Stations) = 360 Batteries  
30 Battery Changes @ 3 hrs of labor = 90hrs x 50\$/hr = \$4500  
360 Batteries x .84oz = 302.4oz or 18.9 lbs

ndite technology eliminates the costs and the environmental impacts that are associated with batteries.

**Q: How much water is saved by the infrared sensors on the lavatory systems?**

A. An automatic sensor controlled lavatory system saves more than 30% of the overall water use of the fixture. This savings adds up, replacing two standard manual faucets with one two station lavatory system can result in savings over \$5500 annually.

For more information on Express® Lavatory Systems, please visit [bradleycorp.com](http://bradleycorp.com).