

# APPLICATION

## WIRELESS NETWORKS

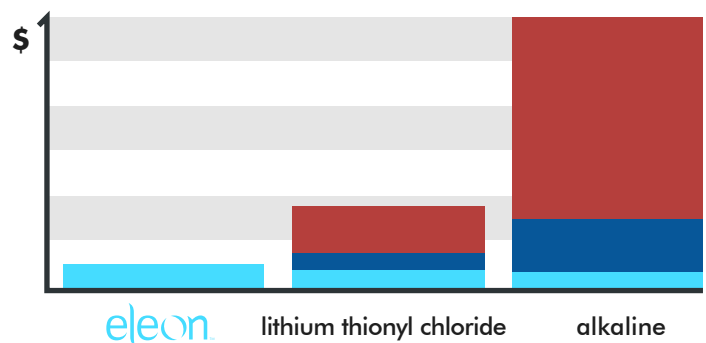
**Batteries are cheap. Replacing them isn't!® Short-lived batteries are a major impediment to widespread installation of many sensor technologies for commercial, industrial, residential, and military applications. ELEON Integrated Power supplies are built to extend the operating lifetime of many edge-of-network devices, reducing or eliminating the need to replace batteries.**

### VALUE PROPOSITION

Just like traditional batteries, ELEON is inexpensive. The primary cost of powering wireless networks is the labor to replace the batteries. ELEON will reduce the need to replace batteries.

-  replacement labor
-  replacement batteries
-  devices with power supplies

COST OF WIRELESS SENSOR NODE OWNERSHIP



### MARKETS

- Active RFID:** ELEON solves the power supply issues that have handicapped the Active RFID industry for years.
- Automated Meter Reading:** ELEON power supplies are calculated to last over 25 years in many AMR applications.
- Home Automation:** With ELEON, home automation devices can finally offer the convenience they promise.
- Wireless Cameras:** ELEON can extend the life of mesh-networked wireless cameras by over 50%.
- Wireless Wayfinding:** With ELEON, new sensor technologies can now be integrated into wayfinding devices.

### ELEON IN ACTION

ELEON integrated power can increase the operating lifetime of active RFID tags significantly.

#### Active RFID Tags for Freight and Cargo Tracking

Voltage: 3.3V  
Power Usage: 1.31 Wh/day  
Duty Cycle: .66%

#### Traditional Batteries

Type: Li Primary Panasonic CR2477  
Capacity: 1000 mAh

**Estimated life: 5 years**

#### ELEON Integrated Power

Chip-Scale Fuel Cells: 8S/1P  
Each cell = 25µA @.5V  
Design: Li. Ion + Charge Control  
**Estimated life: 20+ years**

## ABOUT ELEON™

ELEON builds energy system solutions to cost-effectively provide *Power for the Life of your Product*. Much smaller than micro-fuel cells, our power supplies are combined with storage, generation, and charge control devices to meet specific power requirements for wireless network, consumer, and life safety products.