Willard SMART EXIT™

A Life Safety IoT Solution

PRESENTED BY:

IBM — CACHE VALLEY ELECTRIC — **Willard IoT**

THE CHALLENGE NFPA 101 Life Safety Regulations

Willard SMART EXIT

- Requires that Exit Sign batteries must be **tested every 30 days** for **not less than 30 seconds**
- **Annual 90-minute testing required**
- Exit Signs must remain **operational during testing**
- Written records shall be **kept by the owner** for inspection by the Authority Having Jurisdiction (AHJ)

Traditional Method for Sign Compliance can be:

Labor-Intensive   Inconvenient   A Liability

Expensive   A Complex Paper Trail

⚠️ *Fines start at $13,000 per violation and raise to $132,000 for repeat offenses*

OLD VS. NEW (SUSTAINABILITY)

Traditional Exit Sign

- Meets UL/ETL, NFPA 101, OSHA, NEC and IESNA standards
- 90-minute *Nickel Cadmium Battery* (NiCad) - Cadmium is a *RESTRICTED* substance under REACH & *BANNED* substance under RoHS, a *HAZARDOUS* substance under TSCA and considered *IMMEDIATELY DANGEROUS TO LIFE & HEALTH* under OSHA.
- "Memory Effect". Not recommended to discharge fully—impacts battery capacity and life
- *3-5-year* battery life
- 6-9 years useful life of Exit Sign

Willard Smart Exit Sign [WSES]

- Meets UL/ETL, NFPA 101, OSHA, NEC & IESNA standards
- 4-hour *Nickel Metal Hydride Battery* (NiMH)
- *Environmentally safe / green battery disposal*
- *13+ year* battery life
- 15 years useful life of Exit Sign
- Integrated patented LED flood lighting
- Embedded control board
- Motion sensors & internal temperature sensor
- Embedded WIFI & Bluetooth
- An IoT Gateway

THE IOT SOLUTION

- Patented Exit Sign Hardware with WiFi communications to the Cloud

- The most advanced Exit Sign on the market with 13 embedded sensors

- Consolidated enterprise compliance view of all Exit Sign Battery

- Self Diagnostics / Self Reporting

- Maximo EAM Integration for maintenance of signs / Work Orders

- Smart Ledger App (iOS) for maintenance to inspect all life safety assets

- Digitization of manual life safety into Cloud

- Compliance reports on-demand

BENEFITS

- Enterprise data visibility

- Remove need for manual testing / visual inspection

- Instant ROIs—reduced liability and immediate cost out

- Risk Reduction
  - Avoidance of expense penalties
  - Automation of Compliance
  - Knowing Exit Signs will function in an emergency

- Maximo EAM provides automated service requests

- Cloud-based IoT solution software

ROI & VALUE

The Cost of Traditional Exit Signs

Unit Price: $100-$300

+

30-second monthly test costs

+

90-minute annual test costs

$5,000 – $10,000
per sign over 6-9 year lifespan

$1,500 – $3,300
per sign cost for 5 years

$25 – $50
per sign per month

Realize quick ROI with Willard Smart Exit Signs

12-Month Full Return on Investment

- **Finance options (CapEx / OpEx through IBM Global Finance)**
- **Safety – Knowing your Exit Signs will function in any emergency**
- **Useful life of Exit Sign — 15 years as opposed to 6-9**

THE WILLARD SMART EXIT PARTNERSHIP TEAM

IBM

- WSES sales force

- Utilizes Maximo software

- Offers information platforms that protect privacy and the integrity of large amounts of data

CVE
CACHE VALLEY ELECTRIC

- WSES distributor

- Oversees all sign installations

- Offers customers sign maintenance and management packages through its Network Operations Center

WillardIoT

- WSES developer

- Develops IoT solutions that target Life Safety Equipment focusing on digitizing the data flow and regulatory compliance

OBSERVIAN
POWERED BY CVE

- Provides software and firmware development

- Mobile and web applications for installation and administration

- Multi-cloud data lake

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LIGHTING

- Designed and engineered WSES

- WSES components designed for useful lifecycles that significantly exceed lighting industry standards

FUTURE INNOVATIONS

Willard Smart Exit Sign as an IoT Gateway/Device

- Wayfinding
- Track & Trace
- Environmental Sensing
- Acoustics
- Edge Computing
- People Counting

Additional Smart Life Safety Devices

- Emergency Lighting
- Fire Extinguishers
- Acoustic Fire Doors
- Sprinkler Systems
- Smoke Detectors