# Smart Blinky





MID-RANGE ELECTROLYTE INDICATOR THAT IS IDEAL FOR BATTERIES WHERE THE TOP CAN BE SEEN



**RELIABLE INDICATIONS** 

### OBLIVIOUS



Electrolyte levels can rise and fall due to different factors, which can confuse a battery operator so that they water batteries that don't need watering.

This can cause:

- Dilution of the electrolyte
- Boil-overs and acid spills
- Damage to the battery

Without indication, it can get difficult to know whether batteries need water or not. This means that operators guess or create a watering schedule that can be wrong.



The SmartBlinky provides clear indication with its bright green and red LED's. It also has a SmartDELAY feature, which means there isn't a false indication.

The SmartBlinky helps to:

- Give reliable indication
- Protect against battery dry out
- Save money and labor time

The SmartBlinky blinks green when the electrolyte level is OK and goes red when the level is low for 24 hours. This provides 100% confidence that the battery won't overflow.

### WITH A LOW-COST INSTALL THE SMARTBLINKY PROVIDES A ROI IN JUST 18 WEEKS THROUGH INCREASED BATTERY LIFE AND REDUCED MAINTENANCE COST

### **AWARE**

### SMART AND VERSATILE

The SmartBlinky improves battery maintenance by intelligently alerting operators when a battery needs water. This means that maintenance tasks can be performed on batteries only when necessary. With the SmartBlinky, time isn't wasted inspecting and watering batteries that don't require filling.



**Brightest LED:** SmartBlinky's LED is the brightest available and eight times brighter than the previous model.

**Patented design:** SmartBlinky is an electronic probe that senses the electrolyte in a cell. The simple, low-cost circuit provides a clear indication when a battery needs water.

**Rugged design:** SmartBlinky has a lower profile than its predecessor and is made of corrosion-resistant materials.

**Wide operating range:** Connect between 4 to 12 volts, therefore suitable for both 6v and 12v monoblocks.

**Forgiveness zone:** Connection between 14 to 16 volts causes a SmartBlinky to hibernate.

**Reverse polarity protection:** Connecting SmartBlinky 'the wrong way round' will not damage it.

**Three connection types:** Available with B = M10 steel ring for bolt intercell connectors, Q = FlexiTap self-piercing option; S = M4 self-tapping screw and steel ring.

**Fits all cells:** The probe length is cut to size by the installer.

**Reduce watering intervals:** Improve productivity by only watering batteries when necessary.

**Immediate ROI:** A low-cost solution that delivers fast ROI through reduced labor costs and by preventing battery damage.

**Battery friendly probe:** The conductive probe of SmartBlinky is made of lead alloy for compatibility with lead-acid batteries.

**Self-powered:** SmartBlinky is powered by the battery on which it is installed and uses a tiny amount of energy, which won't reduce battery life.

**Warranty:** SmartBlinky comes with a one-year conditional warranty and has an anticipated design life of greater than five years.

**Improved operator safety:** The indicator means maintenance staff no longer need to peer into vent walls to check water levels.

### **PRODUCT SPECIFICATIONS**



| SPECIFICATION               |                              | NOTES    |
|-----------------------------|------------------------------|----------|
| System exposure temperature | -20° to 160°F (-29° to 71°C) |          |
| Operating voltage           | 4 to 12 VDC, 6 VDC Nominal   |          |
| Forgiveness zone            | 14 to 16 VDC                 |          |
| Permanent failure           | 18 VDC or greater            |          |
| Nominal current             | 12mA                         |          |
| Weight                      | 1.05 oz (29.7g)              |          |
| Part number                 | ACC-SWM3                     |          |
| Fuses - M10 and M4          | 1 x board                    |          |
| Fuses – FlexiTap            | 1 x board, 1 x FlexiTap      |          |
| Warranty                    | 1 Year                       |          |
| UL Certified                | Yes                          |          |
| M10 Connection              | ACC-SWM3-B                   | Bolted   |
| M4 Connection               | ACC-SWM3-S                   | Screw    |
| FlexiTap connection         | ACC-SWM3-Q                   | Piercing |
| Cable colours               | Black and red                |          |

### **BENEFITS THAT PROTECT YOUR ASSETS**



PREVENTS DRY-OUT



SMART SENSING TECHNOLOGY



The SmartBlinky is our mid-range electrolyte monitor within the Blinky range of products and gives you the protection you need to stop batteries failing prematurely. For added protection against boil-over and added audio alerts, consider upgrading to the SmartBlinky™ PRO.



### FOR MORE INFORMATION ON THE SMARTBLINKY PLEASE VISIT: BIT.LY/SMARTBLINKY

DOC0129 © 2019 Philadelphia Scientific LLC. All Rights Reserved. Philadelphia Scientific and the PS logo are registered trademarks of Philadelphia Scientific. Blinky, Basic Blinky, SmartBlinky, SmartBlinky Remote, SmartBlinky Pro are trademarks of Philadelphia Scientific LLC.

### WWW.PHLSCI.COM

Philadelphia Scientific LLC P: +1 (215) 616 0390 E: info@phlsci.com

Philadelphia Scientific EMEA P: +44 (0) 1204 467777 E: info@ps-europe.net in f 🖌 🛅 🗘 🖸

Philadelphia Scientific ASIA PACIFIC P: +61 (2) 8004 2447 E: info@phlsci.com.au



## **Battery Watering Monitors**

### Let your batteries tell you when they need water



Blinking green LED indicates electrolyte level is good



Blinking red LED indicates battery needs water

Philadelphia Scientific's battery watering monitors' compact size allows fit onto crowded battery tops and their very bright LED allows for maximum visibility.

### **Saves Money**

- Allows you to water only those batteries that need water
- Prolongs battery life never lets a battery dry out
- Monitors add minimal cost to batteries

### **Saves Time**

- Eliminates labor time wasted checking battery levels
- Advanced technology eliminates false indication, maximizes watering intervals

#### Easy to Use

- Bright LED is easy to see
- Probe comes in a number of standard sizes and is easy to trim for a custom fit

The biggest problem in battery maintenance is knowing when to fill batteries with water. Without indication, operators must devise watering schedules or carry out weekly inspections to maintain the batteries. Time is often wasted when inspecting and watering batteries that do not require filling, while batteries left under-watered can suffer costly permanent damage.

Philadelphia Scientific's watering monitors dramatically improve battery maintenance by intelligently alerting personnel when a battery needs water — and when it does not. These monitors allow watering on a labor-saving "as-needed" basis instead of a hit-or-miss schedule. Watering too frequently can cause electrolyte boil overs, which reduce battery capacity by three percent for each occurrence. Lack of water in batteries creates a low electrolyte level, eventually causing permanent damage to the cells. Philadelphia Scientific's Blinky<sup>™</sup>, Smart Blinky<sup>™</sup> and Smart Blinky Remote<sup>™</sup> will help ensure your electrolyte levels are never too low or too high.

As an essential tool for good maintenance, Philadelphia Scientific's watering monitors are a must for all industrial batteries. All three products are UL classified, with patented designs unique to Philadelphia Scientific.

# **Battery Watering Monitors**

### Prolong battery life with the Battery Watering Monitor

Philadelphia Scientific's watering monitors are easy to see, easy to use and easy to install. All three models offer a flexible design with pre-cut factory lengths and can be easily trimmed for a custom fit. They also enhance the safety of your operation by reducing employees' exposure to acid. Save money and improve productivity with any of our battery watering monitors.

### Blinky™

- LED blinks green when electrolyte is OK
- LED goes out when water is needed

With a legendary reputation for reliability, nothing simplifies battery watering like the Blinky<sup>™</sup>. Our original watering monitor revolutionized the checking of electrolyte levels in industrial batteries. Blinky saves time, reducing labor cost, and delivers a rapid ROI. It is a low-cost solution for electrolyte monitoring.

### Smart Blinky<sup>™</sup>

- LED blinks green when electrolyte is OK
- LED blinks red when water is needed

The Smart Blinky<sup>™</sup> is ideal for batteries where the top of the battery can be seen. Patented Smart Sensing Technology eliminates false indication and maximizes watering intervals to prevent unnecessary watering.

#### Smart Blinky Remote<sup>™</sup>

- LED blinks green when electrolyte is OK
- LED blinks red when water is needed

The Smart Blinky Remote<sup>™</sup> is ideal for batteries that do not leave the truck or for batteries that are charged on multi-level racks because the indicator LED can be edge-mounted for high visibility. The Smart Blinky Remote is an extremely flexible and visible maintenance tool — the most advanced level indicator on the market.

When paired with the Water Injector System<sup>™</sup>, the Stealth Watering System<sup>™</sup> or the Watering Gun, these battery watering monitors are part of the most effective battery maintenance program available.

Products covered by the following U.S. patent numbers: Blinky – U.S. Patent No. 5,936,382 Smart Blinky – U.S. Patent No. 7,812,613



Philadelphia Scientific LLC 207 Progress Drive Montgomeryville, PA 18936 USA P: 215.616.0390 F: 215.616.0500 www.phlsci.com







Light can be edge mounted for best visibility

