

# STELTH<sup>2</sup>

## Solid-State Reference Electrode for Buried and Concrete Service



- Minimum 30-year service life.
- Infinite shelf life, infinite stability.
- Available in four chemistries: Pd-PdCl<sub>2</sub>, Cu-CuSO<sub>4</sub>, Ag-AgCl, Zn-ZnSO<sub>4</sub>.
- Color-coded for quick and easy identification.
- 32 in<sup>2</sup> of sensing surface area. This makes electrode positioning less critical to achieve accurate readings.
- Will not dry out in desert soil, a condition that renders other electrodes ineffective. Cyclical variations in soil conditions, ranging from hydrated to dehydrated have no adverse effects on the **STELTH<sup>2</sup>** Reference Electrode.
- Electrodes may be taken out of service for extended periods of time and reintroduced into the system without affecting electrode accuracy or ability to reactivate. (Electrode will reactivate in less than five minutes.)
- Technologically-advanced "ion trap" prevents contamination of internal electrolytes.
- Two levels of chloride ion trapping technologies are used in the **STELTH<sup>2</sup>** Reference Electrode:
  - First, we impregnate a trapping material into the ceramic sensing tube that traps chloride ions before they reach the chemistry of the **STELTH<sup>2</sup>** (patent pending).
  - Second, we employ a chloride ion trapping system that removes chloride ions that penetrate the chemistry of the **STELTH<sup>2</sup>** before these ions can cause damage.
- **Note:** The **STELTH<sup>2</sup>** Cu-CuSO<sub>4</sub> is stable up to levels of 1,000 parts per million.
- Each **BORIN<sup>®</sup> STELTH<sup>2</sup>** Solid-State reference electrode is individually tested, certified, and has an individual serial number, allowing for traceability of any single cell throughout its lifetime.
- Complete installation instructions included

**Size:** 1.5" (40 mm) diameter x 7" (180 mm) long.

**Lead Wire:** 50' (15 m) of #14 (2.5 mm<sup>2</sup>)

RHH-RHW wire.

**Stability:** ±5 millivolts.

**Material:** Ceramic with moisture retention membrane.

**Working Temperature Range:** 32° F to +176° F (0° C to 80° C).

**Material Temperature Range:** -60° F to +185° F (-51° C to 85° C).

### **BORIN<sup>®</sup> Stelth<sup>2</sup> Solid-State Reference Electrode for Buried and Concrete Service**

#### **STELTH<sup>2</sup> – Model SRE-041-HCP**

Hydro-Carbon Proof (Pd-PdCl<sub>2</sub>)

For direct burial and concrete suitable for *any level of chloride* in the environment.

#### **STELTH<sup>2</sup> – Model SRE-007-CUY**

Copper-Copper Sulfate (Cu-CuSO<sub>4</sub>)

For direct burial and concrete in *chloride-free* conditions.

#### **STELTH<sup>2</sup> – Model SRE-008-SFB**

Silver-Silver Chloride (Ag-AgCl)

For direct burial and concrete in *chloride* conditions.

#### **STELTH<sup>2</sup> – Model SRE-009-ZUR**

Zinc-Zinc Sulfate (Zn-ZnSO<sub>4</sub>)

For direct burial and concrete in *chloride-free* conditions.

