

Stelth 1 – Sea Water Service



Stelth 1 – Sea Water Service

Stelth1 Ag-AgCl SRE-004-SFB-WGH
Silver-Silver Chloride (Ag-AgCl)

Size: 1.3" (3.4 cm) dia x 12.5" (32 cm) long

Lead Wire: 20' (6 m) of #14 (2.5 mm²) RHH-RHW wire

Material: High-impact ABS, ceramic



- DELIVERY- IMMEDIATE to 3 DAYS
- Durable and Reliable
- Made in-house



Stelth 1 – Water & Buried: Saturated Soil or Submerged Applications



Stelth 1 – Water & Buried: Saturated Soil or Submerged Applications

FEATURES:

- Minimum 30 year service life.
- Available in three models: CuCuSO_4 , AgAgCl , ZnZnSO_4 .
- Color coded for quick and easy identification.
- Special porous ceramic contact plugs allow remove and re-entry into liquid without damaging the electrode. The unit is thus reusable and may be reactivated (after use) for a period of up to one year.
- Technologically advanced "ion trap" prevents contamination of Cu-CuSO_4 electrolyte.
- High-impact resistant plastic electrode case will not deteriorate even in highly corrosive uniformness.
- Complete installation instructions included.

Size: 1" (25mm) diameter x 8" (203mm) long.

Material: High-impact ABS, ceramic with moisture retention membrane.

Stability: ± 10 millivolts with 3.0 microamps load.

Temperature Range: -10°F to $+176^\circ\text{F}$ (-23°C to 80°C)

Stelth Model SRE-002-CFY

Copper-Copper Sulfate (Cu-CuSO_4)

For water and saturated soil service in *chloride free* conditions.

Stelth Model SRE-004-SFB

Silver-Silver Chloride (Ag-AgCl)

For water and saturated soil service in *chloride* conditions.

Stelth Model SRE-006-ZFR

Zinc-Zinc Sulfate (Zn-ZnSO_4)

For water and saturated soil service in *chloride free* conditions.

STELTH[®] 1

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B[®] Borin
Manufacturing

TECNOLOGÍA TOTAL
CONTROL INTEGRAL DE CORROSIÓN
www.tecnologiatotal.net

Stelth 2 – Buried & Concrete

STELTH[®]2



Stelth 2 – Buried & Concrete

FEATURES:

- Minimum 30-year service life.
- 28 in² of sensing surface area gives you 9-35 times more surface area than other electrodes. 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 2 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 fire up in less than five minutes.)
- Two levels of chloride ion trapping technologies are used in the Stelth 2:
 - First, we impregnate a trapping material into the ceramic sensing tube that traps chloride ions before they reach the chemistry of the Stelth 2 (patent pending).
 - Second, we employ a chloride ion trapping system that removes chloride ions that penetrate the CuSO⁴ chemistry of the Stelth 2 before these ions can cause damage.
- Both of these systems give an additional benefit of lowering the internal resistance of the Stelth 2 reference electrode.
- Note: Chlorides at levels of only 200 parts per million alter the chemistry of a CU-CuSO⁴ reference electrode enough to cause a complete breakdown, resulting in loss of stability and finally a total shut down.

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

Material: Ceramic with moisture retention membrane.

Stability: 5 millivolts with 3.0 microamps load.

Temperature Range: -10° to 176° F (-23° to 80° C)

Stelth Model SRE-007-CUY

Copper-Copper Sulfate (Cu-CuSO₄)

For buried or concrete service in *chloride free* environments.

Stelth Model SRE-008-SUB

Silver-Silver Chloride (Ag-AgCl)

For buried or concrete service in *chloride* environments.

Stelth Model SRE-009-ZUR

Zinc-Zinc Sulfate (Zn-ZnSO₄)

For buried or concrete service in *chloride free* environments.

STELTH[®]2

• DELIVERY- IMMEDIATE to 3 DAYS

• Durable and Reliable

• Made in-house



Stelth 3 – Portable

STELTH[®]3



Stelth 3 – Portable

FEATURES:

- A Stelth 3 permanent portable reference electrode is for use as a half cell.
- A completely solid-state device that never requires recharging, cleaning or servicing of any kind.
- Minimum of a 10-year service life.
- Indefinite shelf life, indefinite stability.
- Color coded for quick and easy identification.
- Technologically advanced "ion trap" prevents contamination of Cu-CuSO₄ electrolyte.
- Never requires maintenance of any kind.
- High-impact-resistant Lexan[®] electrode case will not deteriorate even in highly corrosive environments.
- Will mount on Miller 1A Potential Meter and other accessories.
- Complete operating instructions included.

Size: 1" (25 mm) diameter x 8" (203 mm) long.

Material: High Impact ABS, ceramic with moisture retention membrane.

Stability: ±10 millivolts with 3.0 microamps load.

Temperature Range: -10° to 176° F (-23° to 80° C)

Stelth Model SRE-010-CPY

Copper-Copper Sulfate (Cu-CuSO₄)

Permanent portable for water and/or soil in *chloride free* conditions.

Stelth Model SRE-011-SPB

Silver-Silver Chloride (Ag-AgCl)

Permanent portable for water and/or soil in *chloride* conditions.

Stelth Model SRE-012-ZPR

Zinc-Zinc Sulfate (Zn-ZnSO₄)

Permanent portable for water and/or soil in *chloride free* conditions.

STELTH[®]3

- **DELIVERY- IMMEDIATE to 3 DAYS**
- Durable and Reliable
- Made in-house

**B[®] Borin
Manufacturing**

TECNOLOGÍA TOTAL
CONTROL INTEGRAL DE CORROSIÓN
www.tecnologia-total.net

Stelth 4 – Portable – Fat Cat

STELTH[®]4



Stelth 4 – Portable – Fat Cat

FEATURES:

- A Stelth 4 permanent portable reference electrode is for use as a half cell.
- A completely solid-state device that never requires recharging, cleaning or servicing of any kind.
- Minimum 10 years of service life.
- Indefinite shelf life; indefinite stability.
- Technologically advanced chloride "ion trap" prevents chloride contamination of electrolyte.
- Never requires maintenance of any kind.
- High-impact-resistant plastic electrode case will not deteriorate even in highly corrosive environments.
- Complete operating instructions included.

STELTH[®]4

- **DELIVERY- IMMEDIATE to 3 DAYS**
- Durable and Reliable
- Made in-house

Size: 2.25" (57mm) diameter x 4" (102mm) long high-impact resistant plastic electrode case.

Stability: ± 10 millivolts with 3.0 microamps load.

Temperature Range: -10° to 176° F (-23° to 80° C)

Stelth Model SRE-013-CPY

Copper-Copper Sulfate (Cu-CuSO_4)

Permanent portable with wide sensing area for soil or concrete surfaces in *chloride free* conditions.

Stelth Model SRE-014-SPB

Silver-Silver Chloride (Ag-AgCl)

Permanent portable with wide sensing area for soil or concrete surfaces in *chloride* conditions.

Stelth Model SRE-015-ZPR

Zinc-Zinc Sulfate (Zn-ZnSO_4)

Permanent portable with wide sensing area for soil or concrete surfaces in *chloride free* conditions.

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Manufacturing**

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www.tecnologiatal.net

Stelth 5 – Thru-Hull Marine



Stelth 5 – Thru-Hull Marine

Stelth Model SRE-016-CMY

Copper-Copper Sulfate (Cu-CuSO_4)

For Marine Thru-Hull applications in *fresh water* environments.

Stelth Model SRE-017-SMB

Silver-Silver Chloride (Ag-AgCl)

For Marine Thru-Hull applications in *sea and brackish water* environments.

Stelth Model SRE-018-ZMR

Zinc-Zinc Sulfate (Zn-ZnSO_4)

For Marine Thru-Hull applications in *fresh water* environments.



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Cathodic Protection
Cathodic Protection



Stelth 6 – Concrete



Stelth 6 – Concrete

Stelth Model SRE-019-CCY

Copper-Copper Sulfate (Cu-CuSO_4)

For buried and concrete service in *chloride free* environments (.75" / 19mm diameter).

Stelth Model SRE-020-SCB

Silver-Silver Chloride (Ag-AgCl)

For buried and concrete service in *chloride* environments (.75" / 19mm diameter).

Stelth Model SRE-021-ZCR

Zinc-Zinc Sulfate (Zn-ZnSO_4)

For buried and concrete service in *chloride free* environments (.75" / 19mm diameter).



- DELIVERY- IMMEDIATE to 3 DAYS
- Durable and Reliable
- Made in-house

Cathodic Protection
Cathodic Protection

B Borin
Manufacturing



Stelth 7 – IR Free Probe Ag-AgCl

Stelth 7 – IR Free Probe Ag-AgCl

- The **Stelth 7 IR Free** and **Stelth 7 IR Free Rocket** reference electrodes were developed to take IR-Free on-potential and off-potential readings of a structure without having to shut down or to turn off any interference systems such as your own system rectifier, other rectifiers in the area, electric trains and subways, electrical transmission lines, etcetera, while reading only the single worst potential that exists on that structure.
- The **Stelth 7 IR Free** and **Stelth 7 IR Free Rocket** reference electrodes have a minimum design life of 30 years and an indefinite shelf life.
- The **Stelth 7 IR Free** and **Stelth 7 IR Free Rocket** reference electrodes will maintain a stability of 5 millivolts with 20 mega ohms impedance over 30 years.
- The **Stelth 7 IR Free** and **Stelth 7 IR Free Rocket** reference electrodes will operate in all ranges of soil and water conditions, from desert dry soils to flood zones, swamps, sea and fresh water environments.
- **Eliminates expensive interrupters.** Eliminates the tedious procedure of synchronizing a series of interrupters.
- **Allows you to take off-potential readings on rectifiers that have high amperage outputs which are beyond the handling capacity of the interrupters on the market today.**
- This technology easily allows any remote monitoring and control system (process control system) to automate the IR Free on-potential and off-potential readings of a structure.
- On-potential and off-potential measurements can now be taken with a total disregard for any and all outside influences, such as your own rectifier, neighboring rectifiers, anode beds, electric transmission lines, trains and subways, steel in concrete, etcetera.
- Now, with the **Stelth 7** and the **Bullet® Box IR Free interrupter** you can read the current required to protect the holiday with the worst potential on your structure in the area being monitored.
- Can be reused and taken out of service as many times as desired.
- Shipping weight is only 3 pounds.
- Temperature range from -10° to 176°F (-23° to 80°C).



- DELIVERY- IMMEDIATE to 3 DAYS
- Durable and Reliable
- Made in-house

Built strictly to the DIN Standard 50925 – European and U.S. patents applied for.

Size: 2.25" (60 mm) diameter x 8.5" (220 mm) long.

Material: High Impact ABS, ceramic with moisture retention membrane.

Stability: 5 millivolts with 3.0 microamps load.

Temperature Range: -10° to 176° F (-23° to 80° C)

Includes: Bullet Box® IR Free Interrupter

Stelth Model SRE-025-SIB

Silver-Silver Chloride (Ag-AgCl)

IR-Free probe with 1cm² coupon and Bullet Box interrupter providing ON & OFF potentials, 100mV shift, and current readings for chloride environments.

Stelth Model SRE-026-SIB

Silver-Silver Chloride (Ag-AgCl)

IR-Free probe with 10cm² coupon and Bullet Box interrupter providing ON & OFF potentials, 100mV shift, and current readings for chloride environments.

Stelth Model SRE-027-SIB

Silver-Silver Chloride (Ag-AgCl)

IR-Free probe with 100cm² coupon and Bullet Box interrupter providing ON & OFF potentials, 100mV shift, and current readings for chloride environments.





Stelth 7 – IR Free Probe Cu-CuSO⁴

Stelth 7 – IR Free Probe Cu-CuSO⁴

FEATURES:

- The Stelth 7 IR Free and Stelth 7 IR Free Rocket reference electrodes were developed to take IR-Free on-potential and off-potential readings of a structure without having to shut down or to turn off any interference systems such as your own system rectifier, other rectifiers in the area, electric trains and subways, electrical transmission lines, etcetera, while reading only the single worst potential that exists on that structure.
- The Stelth 7 IR Free and Stelth 7 IR Free Rocket reference electrodes have a minimum design life of 30 years and an indefinite shelf life.
- The Stelth 7 IR Free and Stelth 7 IR Free Rocket reference electrodes will maintain a stability of 5 millivolts with 20 mega ohms impedance over 30 years.
- The Stelth 7 IR Free and Stelth 7 IR Free Rocket reference electrodes will operate in all ranges of soil and water conditions, from desert dry soils to flood zones, swamps, sea and fresh water environments.
- **Eliminates expensive interrupters.** Eliminates the tedious procedure of synchronizing a series of interrupters.
- **Allows you to take off-potential readings on rectifiers that have high amperage outputs which are beyond the handling capacity of the interrupters on the market today.**
- This technology easily allows any remote monitoring and control system (process control system) to automate the IR Free on-potential and off-potential readings of a structure.
- On-potential and off-potential measurements can now be taken with a total disregard for any and all outside influences, such as your own rectifier, neighboring rectifiers, anode beds, electric transmission lines, trains and subways, steel in concrete, etcetera.
- Now, with the Stelth 7 and the Bullet[®] Box IR Free interrupter you can read the current required to protect the holiday with the worst potential on your structure in the area being monitored.
- Can be reused and taken out of service as many times as desired.
- Shipping weight is only 3 pounds.
- Temperature range from -10° to 176°F (-23° to 80°C).



- DELIVERY- IMMEDIATE to 3 DAYS
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Built strictly to the DIN Standard 50925 – European and U.S. patents applied for.

Size: 2.25" (60 mm) diameter x 8.5" (220 mm) long.

Material: High Impact ABS, ceramic with moisture retention membrane.

Stability: 5 millivolts with 3.0 microamps load.

Temperature Range: -10° to 176° F (-23° to 80° C)

Includes: Bullet Box[®] IR Free Interrupter

Stelth Model SRE-022-CIY

Copper-Copper Sulfate (Cu-CuSO₄)

IR-Free probe with 1cm² coupon and Bullet Box interrupter providing ON & OFF potentials, 100mV shift, and current readings for chloride free environments.

Stelth Model SRE-023-CIY

Copper-Copper Sulfate (Cu-CuSO₄)

IR-Free probe with 10cm² coupon and Bullet Box interrupter providing ON & OFF potentials, 100mV shift, and current readings for chloride free environments.

Stelth Model SRE-024-CIY

Copper-Copper Sulfate (Cu-CuSO₄)

IR-Free probe with 100cm² coupon and Bullet Box interrupter providing ON & OFF potentials, 100mV shift, and current readings for chloride free environments.





Stelth 7 – IR Free Probe Zn-ZnSO₄

Stelth 7 – IR Free Probe Zn-ZnSO₄

FEATURES:

- The **Stelth 7 IR Free** and **Stelth 7 IR Free Rocket** reference electrodes were developed to take IR-Free on-potential and off-potential readings of a structure without having to shut down or to turn off any interference systems such as your own system rectifier, other rectifiers in the area, electric trains and subways, electrical transmission lines, etcetera, while reading only the single worst potential that exists on that structure.
- The **Stelth 7 IR Free** and **Stelth 7 IR Free Rocket** reference electrodes have a minimum design life of 30 years and an indefinite shelf life.
- The **Stelth 7 IR Free** and **Stelth 7 IR Free Rocket** reference electrodes will maintain a stability of 5 millivolts with 20 mega ohms impedance over 30 years.
- The **Stelth 7 IR Free** and **Stelth 7 IR Free Rocket** reference electrodes will operate in all ranges of soil and water conditions, from desert dry soils to flood zones, swamps, sea and fresh water environments.
- **Eliminates expensive interrupters.** Eliminates the tedious procedure of synchronizing a series of interrupters.
- **Allows you to take off-potential readings on rectifiers that have high amperage outputs which are beyond the handling capacity of the interrupters on the market today.**
- This technology easily allows any remote monitoring and control system (process control system) to automate the IR Free on-potential and off-potential readings of a structure.
- On-potential and off-potential measurements can now be taken with a total disregard for any and all outside influences, such as your own rectifier, neighboring rectifiers, anode beds, electric transmission lines, trains and subways, steel in concrete, etcetera.
- Now, with the **Stelth 7** and the **Bullet® Box IR Free interrupter** you can read the current required to protect the holiday with the worst potential on your structure in the area being monitored.
- Can be reused and taken out of service as many times as desired.
- Shipping weight is only 3 pounds.
- Temperature range from -10° to 176°F (-23° to 80°C).



- DELIVERY- IMMEDIATE to 3 DAYS
- Durable and Reliable
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Built strictly to the DIN Standard 50925 – European and U.S. patents applied for.

Size: 2.25" (60 mm) diameter x 8.5" (220 mm) long.

Material: High Impact ABS, ceramic with moisture retention membrane.

Stability: 5 millivolts with 3.0 microamps load.

Temperature Range: -10° to 176° F (-23° to 80° C)

Includes: Bullet Box® IR Free Interrupter

Stelth Model SRE-028-ZIR

Zinc-Zinc Sulfate (Zn-ZnSO₄)

IR-Free probe with 1cm² coupon and Bullet Box interrupter providing ON & OFF potentials, 100mV shift, and current readings for chloride free environments.

Stelth Model SRE-029-ZIR

Zinc-Zinc Sulfate (Zn-ZnSO₄)

IR-Free probe with 10cm² coupon and Bullet Box interrupter providing ON & OFF potentials, 100mV shift, and current readings for chloride free environments.

Stelth Model SRE-030-ZIR

Zinc-Zinc Sulfate (Zn-ZnSO₄)

IR-Free probe with 100cm² coupon and Bullet Box interrupter providing ON & OFF potentials, 100mV shift, and current readings for chloride free environments.



Stelth 7 – Rocket – IR Free Probe⁴

STELTH[®] 7

- DELIVERY- IMMEDIATE to 3 DAYS
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Stelth 7 – Rocket – IR Free Probe⁴

Stelth Model SRE-031-CSY
Copper-Copper Sulfate (Cu-CuSO_4)

IR-Free probe with 100cm² coupon and Bullet Box interrupter providing ON & OFF potentials, 100mV shift, and current readings for chloride-free environments.

Stelth Model SRE-032-SSB
Silver-Silver Chloride (Ag-AgCl)

IR-Free probe with 100cm² coupon and Bullet Box interrupter providing ON & OFF potentials, 100mV shift, and current readings for chloride environments.

Stelth Model SRE-033-ZSR
Zinc-Zinc Sulfate (Zn-ZnSO_4)

IR-Free probe with 100cm² coupon and Bullet Box interrupter providing ON & OFF potentials, 100mV shift, and current readings for chloride-free environments.

STELTH[®] 7

- DELIVERY- IMMEDIATE to 3 DAYS
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Stelth 8 – Thru-Hull Tanks



Stelth 8 – Thru-Hull Tanks

FEATURES:

- The Stelth 8 thru-hull stationary reference electrode is for fresh water or high-chloride water service.
- Special porous ceramic plug allows removal and re-entry into liquids without damaging the reference electrode.
- The unit is reusable and may be reactivated (after use) for periods of up to one year.
- Technologically advanced "ion trap" prevents contamination of Cu-CuSO₄ electrode electrolyte.
- High impact-resistant plastic electrode case will not deteriorate even in highly corrosive environments.
- Minimum 20 year service life.
- Color coded for quick and easy identification.
- Complete installation instructions included.



- **DELIVERY- IMMEDIATE to 3 DAYS**
- Durable and Reliable
- Made in-house

Material: Ceramic with moisture retention membrane. Probe housing is 18.8 Stainless Steel. Probe is etched Teflon. Condulet is Carbon Steel.

Stability: 5 millivolts with 3.0 microamps load.

Temperature Range: -10° to 176° F (-23° to 80° C)

Stelth Model SRE-034-CTY

Copper-Copper Sulfate (Cu-CuSO₄)

For storage tank "Thru-Hull" for *chloride free* applications.

Stelth Model SRE-035-STB

Silver-Silver Chloride (Ag-AgCl)

For storage tank "Thru-Hull" for *chloride* applications.

Stelth Model SRE-036-ZTR

Zinc-Zinc Sulfate (Zn-ZnSO₄)

For storage tank "Thru-Hull" for *chloride free* applications.



Stelth 9 – Deep Sea



Stelth 9 – Deep Sea

FEATURES:

- The Stelth 9 deep water stationary reference electrode is for fresh water, brackish water, or high-chloride water service.
- Minimum 30 year service life; indefinite shelf life, indefinite stability.
- Color coded for easy identification: **Yellow** for Copper-Copper Sulfate, **Blue** for Silver-Silver Chloride, **Red** for Zinc-Zinc Sulfate.
- All lead wires will bear the **BORIN Manufacturing** name for quick identification and be #10 RHH-RHW or better.
- Available in 5, 10, 15, and 20 lb. weights. (To be specified.)
- Deep water and high current applications.
- Never requires maintenance.
- Completely self-flushing; cannot be contaminated by sea water life.
- Absolutely crush-proof at any depth.
- High impact resistant plastic electrode and weight, case will not deteriorate even in highly corrosive environments.



- **DELIVERY- IMMEDIATE to 3 DAYS**
- Durable and Reliable
- Made in-house

Size: 2" (5cm) diameter x 20" (51 cm) long ceramic tube.

Lead wire: 100' (30.5m) of #10 RHH-RHW black wire.

Material: High impact ABS.

Stability: 5 millivolts with 3.0 microamps load.

Temperature Range: -10°F to +176°F (-23°C to 80°C)

Stelth Model SRE-037-CSY

Copper-Copper Sulfate (Cu-CuSO_4)

For "Deep-Water" applications in *fresh chloride free* environments (crush-proof and weighted).

Stelth Model SRE-038-SSB

Silver-Silver Chloride (Ag-AgCl)

For "Deep-Sea" applications in *chloride* environments (crush-proof and weighted).

Stelth Model SRE-039-ZSR

Zinc-Zinc Sulfate (Zn-ZnSO_4)

For "Deep-Water" applications in *fresh chloride free* environments (crush-proof and weighted).

