

Composite Reference Tube

A composite reference tube is a highly integrated corrosion monitoring sensor. It combines a long-life reference electrode and a polarization coupon (i.e., auxiliary electrode) into a single structure. Its core function is the in-situ, synchronous, and precise measurement of the "polarization potential" of buried or submerged metallic structures, which is the most direct and critical parameter for evaluating cathodic protection effectiveness.

KEY FEATURES

1. Extremely High Measurement Accuracy
2. Authentic & Reliable Data
3. Simple Installation
4. Real-Time Dynamic Monitoring

PRODUCT SPECIFICATIONS

Enclosure Material: PVC

Enclosure Dimensions: $\Phi 200 \times 1600$ mm length

Potential Measurement Accuracy: ± 2 mV

Polarization Current Range: $1\mu\text{A} \sim 10\text{mA}$

Instant-Off Measurement Time: < 1 millisecond

Integrated Ref. Electrode: Cu/CuSO₄

Coupon Material: Carbon Steel (Q235, X20, X70, etc.)

Coupon Size: 1.0mm² (AC coupon), 6.5mm² (Polarization coupon), 10mm² (Natural coupon)

Operating Temp. Range: -20°C to 60°C



APPLICATIONS

1. Precise Commissioning & Acceptance of CP Systems
2. High-Resistivity Soils or Complex Interference Environments
3. Coating Quality Assessment
4. Academic Research & Standard Validation