Model IT – Permanent Portable Reference

**Typical Applications:**
- Permanent portable reference electrode for potential measurements in the field

**Featuring:**
- Maintenance-free construction – never needs re-building
- Eliminates need for hazardous liquid waste disposal
- End-grain wood membrane resists clogging and dry-out
- Can be used with submersible adapters and CIS survey probes
- Can be used in any position

**Element Specifications**

<table>
<thead>
<tr>
<th>Max. Temp.</th>
<th>+140F (60C)</th>
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<tbody>
<tr>
<td>Min. Temp.</td>
<td>+32F (0C)</td>
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<tr>
<td></td>
<td>-30F (-34C) with optional antifreeze</td>
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**Design life** 20+ yrs.  
**Shelf life** indefinite when stored indoors with end cap in place

The Model IT is used to take potential measurements in any application where a standard, liquid-junction portable reference electrode is presently being used. Because the Model IT contains a gel rather than a liquid, it can be used in all positions and will neither leak nor require refilling or cleaning. The hardwood plug offers several advantages over the conventional ceramic membrane: it will not clog as readily, it is resistant to salt blockage, and it can be reworked by light sanding or cutting if it becomes contaminated with oil. These electrodes can be ordered with a temperature indicator bonded to the electrode body and/or antifreeze added to the gel so that the electrode will not be damaged if exposed to sub-freezing temperatures. However, antifreeze may shift the reference potential by up to 12 mV.

**Element Types**

- AGG saturated gelled Ag/AgCl (gray housing)
- CUG saturated gelled Cu/CuSO₄ (blue housing)
1/4-20 NC stud and knurled nut

end grain hardwood plug

Specify as EDI Model ITx-yyy-ST
where x = option code:
T for temperature sensor,
A for antifreeze, otherwise blank
and yyy = element type: CUG or AGG
CUG = Cu/CuSO₄  AGG = Ag/AgCl/sat. KCl

Cu/CuSO₄ - blue housing
Ag/AgCl - gray housing

Permanent Portable Reference Electrode

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