

APPLICATION NOTE 1408

Thermographic Liquid Crystal Thermometer Combined with QR Code

When Tinker & Rasor, a leading design, developer and manufacturer of electronic inspection equipment and reference electrodes was looking for a novel way to supply an inspector with the support documentation necessary to help with temperature correction in the field, LCR Hallcrest had an answer. This custom 7 event indicator uses red, green, and blue color change to indicate which reference multipliers to use when test calculations are needed based on temperature conditions.

An integrated QR Code allows users to access key support documentation while in the field, using a smart phone. This label is also equipped with a UV protective laminate for prolonged outdoor use.

- Requirement: A low cost thermometer that would provide continuous temperature monitoring of a half- cell (used in electrochemistry) and a QR code so in the event of a temperature excursion the user could access support documentation via the smartphone's QR code reader.
- Solution: LCR Hallcrest created a liquid crystal thermometer with an integrated QR code and UV protective laminate for outdoor use. The Blue and Red color change extremes make it easy to read and interpret.

Product Details

Events: 7

- Event 1. Black to BLUE below 59°F
- Event 2-6. Green 59°F 95°F

- Event 7. Black to RED above 95°F Size: 2.9" X 0.75" Rounded Corners Stock: 5 mil poly with UV protective over laminate Adhesive: Permanent



• Benefits

- Low cost thermometer for temperature measurement
- o Integrated QR code that supplies support documentation via smartphone
- o Custom sized to the relevant equipment
- UV Protective laminate for prolonged use outdoors
- Reinforces company commitment to product support

For Further Information contact vinnie@hallcrest.com or visit www.hallcrest.com and let us show you what we can do! AN1408 Rev 00

LCRHallcrest is an international manufacturer of color and chemical changing temperature measurement labels, indicators and graphics with in-house design, development and manufacturing capability that offers solutions for unique temperature identification problems.