

# Digital Temperature Indicators, Battery Powered



## 822/823 SERIES

- 5 year minimum battery life
- Large 4-digit LCD display
- Utilizes a PT100  $\Omega$  RTD Class A element for temperature sensing
- IP 65 / NEMA 4 rated environmental protection
- All 316 Stainless Steel construction
- Easy installation with various mounting configurations

### APPLICATIONS

- Replacement for bimetal, liquid bulb and glass thermometers
- Pharmaceutical
- Food preparation
- Utilities and municipal refineries
- Chemical and petrochemical plants
- Paper mills
- Hydraulics

### SPECIFICATIONS

|                                 |  |
|---------------------------------|--|
| <b>Temperature ranges</b>       | Standard ranges from -58 °F to 392 °F<br>(-50 °C to 200 °C)  |
| <b>Temperature sensor</b>       | RTD (PT100 DIN EN 60751, Class A)  |
| <b>Housing material</b>         | 316 Stainless Steel  |
| <b>Probe material</b>           | 316 Stainless Steel standard   |
| <b>Maximum pressure</b>         | 500 psig (on probe)  |
| <b>Power requirement</b>        | Lithium battery (3.6 V)  |
| <b>Supply effect</b>            | 0.005%/V   |
| <b>Accuracy</b>                 | $\leq 0.22\%$ full scale; $\leq 0.1\%$ full scale optional   |
| <b>Display</b>                  | 4-digit LCD  |
| <b>Display resolution</b>       | $\pm 0.02\%$ F.S. $\pm 1$ digit  |
| <b>RFI effect</b>               | 1% or less typical   |
| <b>Temperature ranges</b>       | Ambient -40 °F to 176 °F (-40 °C to 80 °C)<br>Effect <0.01% FS/ °C<br>Storage -58 °F to 185 °F (-50 °C to 85 °C) |
| <b>Environmental protection</b> | NEMA 4/ IP 65  |

Thermowells are recommended for pressure, corrosive fluids and high velocity applications, see pages 48-50.



**WARNING:** This product can expose you to chemicals including Lead and Nickel, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

| ORDERING INFORMATION       |                            |   |         |
|----------------------------|----------------------------|---|---------|
| <b>SERIES</b>              | 822 Bottom connection      | 823 Back connection                             |         |
| <b>ACCURACY</b>            | 1 $\leq 0.22\%$ full scale | 2 $\leq 0.1\%$ full scale                       |         |
| <b>PROCESS CONNECTIONS</b> | 0 None                     | 8 1/2" NPT Male                                 |         |
|                            | 2 1/4" NPT Male            | 48 1/2" NPT Male w/sliding compression fitting* |         |
| <b>TEMPERATURE RANGE</b>   | -58/392 -58 °F to 392 °F   | -50/200C -50 °C to 200 °C                       |         |
| <b>STEM LENGTHS **</b>     | 025 2.5"                   | 060 6"  | 120 12" |
|                            | 040 4"                     | 090 9"  | 150 15" |
| <b>STEM DIAMETERS</b>      | 2 1/4"                     | 4 1/2"  | 8 8 mm  |
|                            | 3 3/8"                     | 6 6 mm  |         |

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

\* Add 2" to stem length for this option.

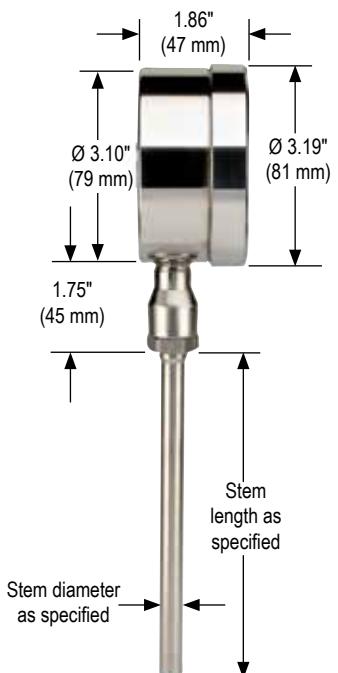
\*\* Consult factory for additional stem length options.

### EXAMPLE

Series ..... 822 Bottom connection  
 Accuracy .....  $\leq 0.22\%$  full scale  
 Process connection ..... 1/2" NPT Male  
 Temperature range ..... -58 °F to 392 °F  
 Stem length ..... 9"  
 Stem diameter ..... 6 mm

822 - 1 - 8 - -58/392 - 090 - 6

### 822 Series



### 823 Series

