

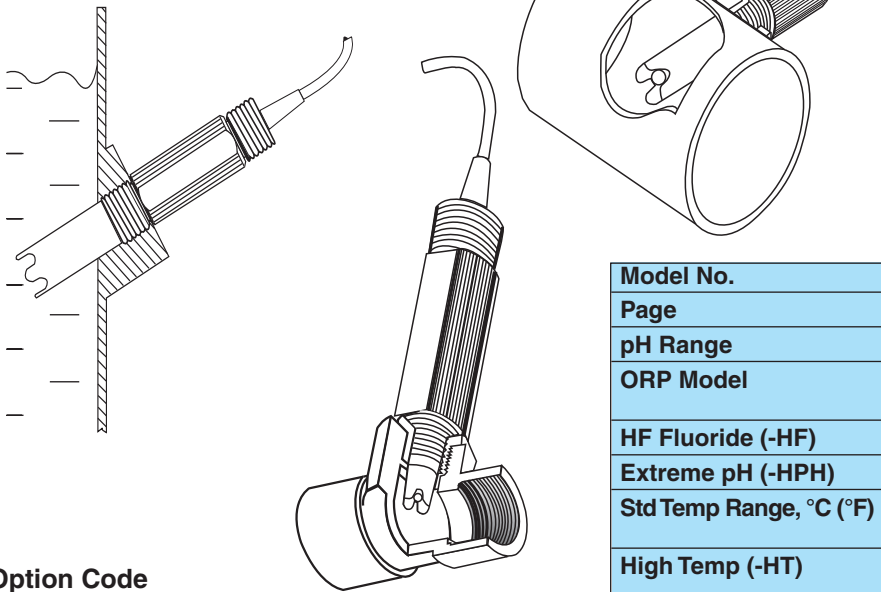


# INDUSTRIAL pH INSTRUMENTATION & ELECTRODES

## Universal Industrial Sensors



- ✓ Universal Solution to Ground Loop with Optional Solution Ground or Differential Amplifier
- ✓ PPS/Ryton® Strong Molded Body
- ✓ Ideal for In-Line or Submersible Use
- ✓ 100 PSI Operating Pressure
- ✓ Porous PTFE Double Junction
- ✓ Automatic Temperature Compensation, Optional
- ✓ Original Self-Cleaning Design Option



### Option Code

| Order Suffix | Description  | Additional Cost |
|--------------|--|-----------------|
| -AMP         | Battery powered amplifier  | \$100           |
| -HT          | High temperature reference cell  | 35              |
| -HPH         | High pH glass  | 30              |
| -HF          | HF/Fluoride resistant  | 50              |
| -PT100       | 100 Ω Pt RTD†  | 25 to 50*       |
| -PT1K        | 1000 Ω Pt RTD†   | 25 to 50*       |
| -SG          | Solution ground  | 45              |
| -SCO         | Self-cleaning option mounting (cleaning cage sold separately model no. PHEH-SCO, \$75)†† | 30              |
| -TJ          | Triple junction reference cell   | 45              |
| -ULT         | Combination of ATC, triple junction, high temp, and solution ground                      | 125             |

Available with pH electrodes only. Not available with option "-ORP"

† Refer to individual electrodes for ATC pricing.

†† Only available with PHE-7451, PHE-7354, PHE-9151, or PHE-9153.

| Model No.                 | PHE-7352-15            | PHE-7451-15  | PHE-7353-15            |
|---------------------------|------------------------|--|------------------------|
| Page                      | D-37                   | <a href="http://omega.com/phe7451">omega.com/phe7451</a> | D-37                   |
| pH Range                  | 0 to 14                | 0 to 14  | 0 to 14                |
| ORP Model                 | ORE-7352-15<br>\$175   | ORE-7451-15<br>\$175                                     | ORE-7353-15<br>\$190   |
| HF Fluoride (-HF)         | \$50                   | \$50   | \$50                   |
| Extreme pH (-HPH)         | \$30                   | \$30   | \$30                   |
| Std Temp Range, °C (°F)   | 0 to 80<br>(32 to 176) | 0 to 80<br>(32 to 176)                                   | 0 to 80<br>(32 to 176) |
| High Temp (-HT)           | 110°C<br>\$35          | 110°C<br>\$35  | 110°C<br>\$35          |
| Reference Cell            | KCl-AgCl/dbl           | KCl-AgCl/dbl   | KCl-AgCl/dbl           |
| Triple Junction (-TJ)     | \$45                   | \$45   | \$45                   |
| Cable/Connector, m (ft)   | 4.5 (15)*/BNC          | 4.5 (15)*/BNC  | 4.5 (15)*/BNC          |
| Length, mm (in)           | 150 (5.9)              | 140 (5.5)  | 120 (4.7)              |
| Diameter, mm (in)         | 22 (0.87)              | 22 (0.87)  | 22 (0.87)              |
| Installation              | ¼ MNPT                 | ¼ MNPT   | ¼ MNPT                 |
| Insertion Length, mm (in) | 23 (0.91)              | 12.5 (0.49)  | 59 (2.32)              |
| Optional Insertion L      | 59 mm<br>PHE-7353      | 59 mm<br>PHE-7354  | 23 mm<br>PHE-7352      |
| Solution Ground (-SG)     | \$45                   | \$45   | \$45                   |
| ATC (-PT100)              | \$40                   | \$40   | \$40                   |
| ATC (-PT1K)               | \$40                   | \$40   | \$40                   |
| ATC (-TH700)              | \$40                   | \$40   | \$40                   |
| ATC (-R3K)                | \$40                   | \$40   | \$40                   |
| Amplifier (-AMP)          | \$100                  | \$100  | \$100                  |
| Diff. Amp (-DIF)          | N/A                    | N/A  | N/A                    |
| Base Price                | \$135                  | \$135  | \$150                  |

\* To order with 6 m (20') cable, replace "-15" in model no. with "-20" and add \$5 to price.

\*\* To order with 6 m (20') cable, replace "-10" in model no. with "-20" and add \$10 to price.

# INDUSTRIAL pH INSTRUMENTATION & ELECTRODES



|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |
| <b>PHE-7354-15</b>  | <b>PHE-9150-15</b>  | <b>PHE-9151-15</b>  | <b>PHE-9152-15</b>  | <b>PHE-9153-15</b>  | <b>PHE-7357-10</b>  | <b>PHE-5551-10</b>  | <b>PHE-5555-10</b>  |
| <a href="http://omega.com/phe7354">omega.com/phe7354</a>                          | <b>D-38</b>   | <b>D-38</b>   | <b>D-38</b>   | <b>D-38</b>   | <b>D-39</b>   | <b>D-39</b>   | <b>D-40</b>   |
| 0 to 14   | 0 to 14   | 0 to 14   | 0 to 14   | 0 to 14   | 0 to 14   | 0 to 14   | 0 to 14   |
| <b>ORE-7354-15</b><br>\$190   | <b>ORE-9150-15</b><br>\$330   | <b>ORE-9151-15</b><br>\$330   | <b>ORE-9152-15</b><br>\$330   | <b>ORE-9153-15</b><br>\$330   | <b>ORE-7357-10</b><br>\$135   | <b>ORE-5551-10</b><br>\$165   | <b>ORE-5555-10</b><br>\$165   |
| \$50  | \$50  | \$50  | \$50  | \$50  | \$50  | \$50  | \$50  |
| \$30  | std   | std   | std   | std   | N/A   | N/A   | N/A   |
| 0 to 80<br>(32 to 176)  | 0 to 80<br>(32 to 176)  | 0 to 80<br>(32 to 176)  | 0 to 80<br>(32 to 176)  | 0 to 80<br>(32 to 176)  | 0 to 80<br>(32 to 176)  | 0 to 110<br>(32 to 230)   | -5 to 125<br>(23 to 257)  |
| 110°C,<br>\$35  | 110°C<br>\$35   | 110°C<br>\$35   | 110°C<br>\$35   | 110°C<br>\$35   | 110°C<br>\$35   | std   | std   |
| <b>KCl-AgCl/dbl</b>   | <b>KCl-AgCl/dbl</b>   | <b>KCl-AgCl</b>   | <b>KCl-AgCl</b>   | <b>KCl-AgCl</b>   | <b>KCl-AgCl/sgl</b>   | <b>KCl-AgCl/dbl</b>   | <b>KCl-AgCl/dbl</b>   |
| \$45  | std   | std   | std   | std   | N/A   | N/A   | N/A   |
| 4.5 (15)*/BNC   | 4.5 (15)*/BNC   | 4.5 (15)*/BNC   | 4.5 (15)*/BNC   | 4.5 (15)*/BNC   | 3 (10)**/BNC  | 3 (10)**/BNC  | 3 (10)**/BNC  |
| 120 (5.9)   | 190 (7.48)  | 180 (7.09)  | 190 (7.48)  | 180 (7.09)  | 140 (5.50)  | 120 (4.73)  | 140 (5.51)  |
| 22 (0.87)   | 22 (0.87)   | 22 (0.87)   | 22 (0.87)   | 22 (0.87)   | 12 (0.48)   | 12 (0.48)   | 12 (0.48)   |
| ¾ MNPT  | ¾ MNPT  | ¾ MNPT  | ¾ MNPT  | ¾ MNPT  | ½ MNPT  | ½ MNPT  | ¾ NPT Adapt.  |
| 59 (2.32)   | 23 (0.91)   | 59 (2.32)   | 59 (2.32)   | 12.5 (0.49)   | 16.5 (0.65)   | 18 (0.71)   | 44.5 (1.75)   |
| 12 mm<br><b>PHE-7351</b>  | 59 mm<br><b>PHE-9152</b>  | 12.5 mm<br><b>PHE-9153</b>  | 23 mm<br><b>PHE-9150</b>  | 59 mm<br><b>PHE-9151</b>  | N/A   | N/A   | N/A   |
| \$45  | \$45  | \$45  | N/A   | N/A   | N/A   | \$45  | \$45  |
| \$40  | std   | std   | std   | std   | N/A   | \$40  | \$40  |
| \$40  | N/A   | N/A   | N/A   | N/A   | N/A   | \$40  | \$40  |
| \$40  | N/A   | N/A   | N/A   | N/A   | N/A   | \$40  | \$40  |
| \$40  | N/A   | N/A   | N/A   | N/A   | N/A   | \$40  | \$40  |
| \$100   | N/A   | N/A   | N/A   | N/A   | N/A   | N/A   | N/A   |
| N/A   | std   | std   | std   | std   | N/A   | N/A   | N/A   |
| \$150   | \$290   | \$290   | \$290   | \$290   | \$95  | \$125   | \$125   |



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