



**OMNTEC**  
Advanced Tank Monitoring & Leak Detection

# PROTEUS® Automatic Tank Gauging and Leak Detection System

Part Number: **OEL8000IIK4**  
**OEL8000IIK8**



## Description

A brighter future in tank gauging and leak detection has arrived with the **PROTEUS** Series. Featuring advanced technology, versatility, scalability, and enhanced features like our 7-inch color touch screen. The **PROTEUS-K** Series can simultaneously monitor product levels, water levels, temperature, leaks, and much more in up to eight tanks. The flexibility of **PROTEUS** makes it ideal for a variety of gauging and leak detection applications.

The OEL8000IIK accepts up to 16 of OMNTEC's Bright Eye (BX Series) sensors for distinguishing product from water or for simply detecting the presence of liquid. A distinct advantage of Bright Eye sensors is they are networked and utilize 4 wire bus technology.

**PROTEUS** does not require sensor or probe input modules, bringing ease to ordering and installation. A built in microprocessor gives each sensor the ability to identify itself and its location, which is displayed along with alarm conditions on the **PROTEUS's** 7-inch color touch screen graphic display.

With OMNTEC's proven reliability, the **PROTEUS** offers an attractive, comprehensive, and user-friendly system that can open doors to endless possibilities.

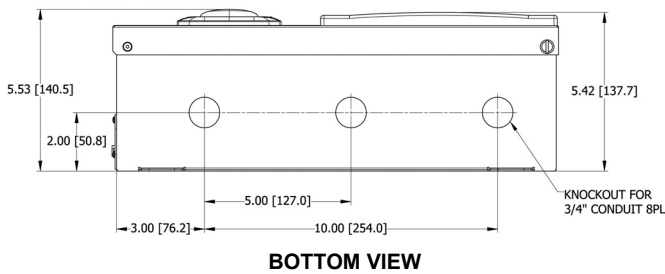
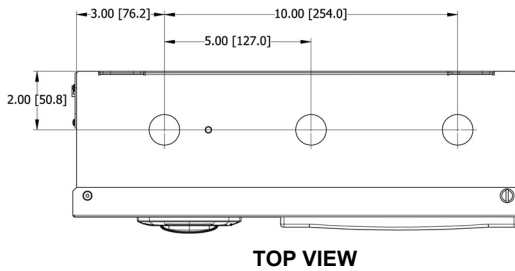
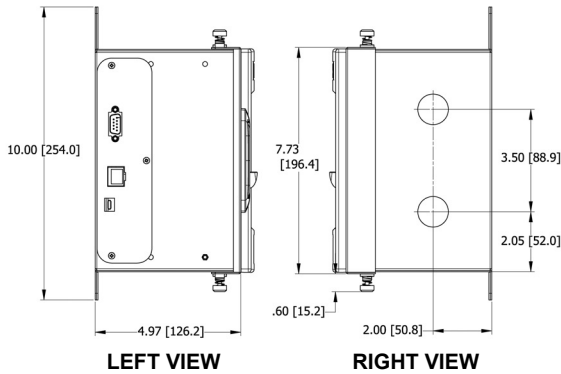
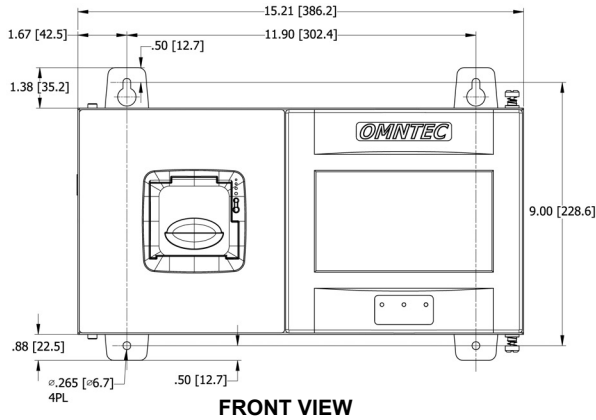
## Features

- Accepts up to 8 magnetostrictive probes
- Accepts up to 16 Bright Eye sensors
- Sensors networked using state of the art 4 wire bus technology
- 1 RS-232 port
- 1 RS-485 port (optional)
- 7-inch color touch screen graphic display
- Large user friendly icons
- Easy to read leak and level alarms
- SD memory card slot (for extended logging)
- CITLD upgradeable
- Modbus RTU & TCP upgradeable
- Ethernet / TCP/IP standard
- Built in web server
- E-mail / Text capability standard
- SIL rated operating system
- Remote display option
- Thermal printer option
- VLD standard
- 3 built in programmable relays
- Up to 8 additional dry contact relays
- Flash based non-volatile memory for program storage (does not require a battery)
- Compatible with OMNTEC PC remote tank inventory monitoring

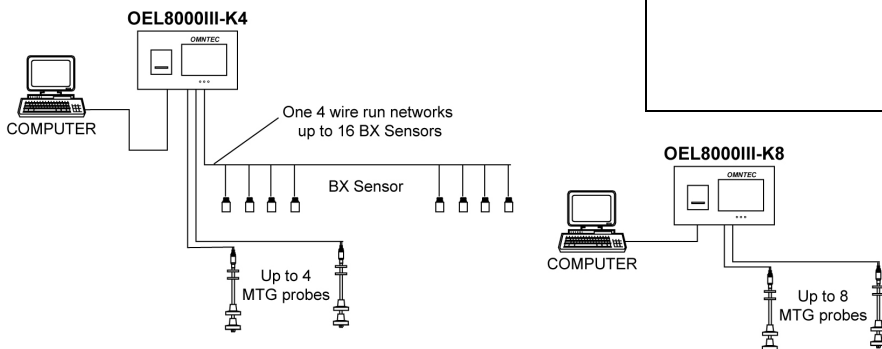
# PROTEUS®



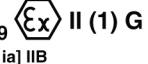
## Automatic Tank Gauging and Leak Detection System

### Part No. OEL8000III-K4 & OEL8000III-K8



### OEL8000III-K Application



| Specifications                 |  |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
|--------------------------------|--|---------|--------------|---------|--|--------|---------------|----|---|----|-----|---|--|----|---|---|-----|---|-----|---|----|----|---|-----|---|---|----|---|
| <b>Optional Features:</b>      | 36-character thermal printer      CITLD upgradeable<br>Modbus RTU and TCP                      OMNTEC PC software  |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Input Power:</b>            | 100-240 VAC +/- 10%    50/60 Hz 60 watts   |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Voltage to Sensors:</b>     | 12 VDC   |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Voltage to Probes:</b>      | 28 VDC   |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Audio Visual Controls:</b>  |  |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Display:</b>                | Color 7-inch graphic display with touch screen   |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Audible alarm:</b>          | 85 dB piezoelectric horn   |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Printer:</b>                | 36-character thermal   |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>System status:</b>          | 3 LED's (OK, Warning, Alarm)   |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Relay Outputs:</b>          | 120 VAC @ 0.6 amp resistive    3 SPST Failsafe   |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Low-voltage Outputs:</b>    | 12 VDC @ 150 mA  |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Operating Temperature:</b>  | 20 to 140° F (-7° to 60° C)  |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Compatible Sensors:</b>     | BX-Series sensors (refer to document no. 900106)   |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>BX-Series Sensor Cable:</b> | Shielded 22 AWG with drain wire (OMNTEC EC-4)<br>Maximum length 2,000 feet (610m)  |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Compatible Probes:</b>      | <b>Rigid Gauging Probe</b> (refer to document no. 900194)<br>MTG-4* (1219mm)    MTG-6* (1829mm)<br>MTG-8* (2438mm)    MTG-10* (3048mm)<br><b>Flexible Fixed Top Probe</b> (refer to document no. 900166)<br>MTG-F-* Series<br><b>Flexible Fixed Bottom Probe</b> (refer to document no. 900162)<br>MTG-FB-* Series<br>*Number signifies shaft length and corresponds to tank diameter.<br>Contact representative for additional lengths.   |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>MTG Probe Cable:</b>        | OMNTEC EC-2 (Shielded Belden #8761)<br>Low Inductance: equal or less than 0.2 microhenries per foot<br>Maximum length 1,000 feet (305m).<br>Consult representative for longer wire runs.   |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Accessories:</b>            | RD7CTS      Mini-Me remote display<br>DDL Series      Delivery Defender Lite universal remote overfill alarm<br>RAS Series      Remote annunciators<br>PS-103      Thermal printer<br>DPU-C      Thermal paper<br>XC-R8      External relay expansion<br>X232-420      External RS-232 to 4-20 ma converter<br>DB-485      RS-485 board<br>C232-BAC      Bacnet TCP/IP converter   |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Weight:</b>                 | 20 lb. (9kg)   |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Dimensions:</b>             | (h) 7.73" (w) 15.21" (d) 5.53"   |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Approvals:</b>              | UL-listed & CUL-listed<br> IECEx UL 13.0057X [Ex ia Ga] IIB<br> [Ex ia] IIB<br> DEMKO 13 ATEX 1341071X   |         |              |         |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| <b>Version Summary:</b>        | <table border="1"> <thead> <tr> <th>Version</th> <th>Probes</th> <th>Sensors</th> <th>Audio/Visual</th> <th>Relays</th> <th>Communication</th> </tr> </thead> <tbody> <tr> <td>K4</td> <td>4</td> <td>16</td> <td>yes</td> <td>3</td> <td rowspan="4">(1) RS-232<br/>(1) TCP/IP<br/>(1) Expansion Port<br/>(1) SD Card slot</td> </tr> <tr> <td>K8</td> <td>8</td> <td>0</td> <td>yes</td> <td>3</td> </tr> <tr> <td>K4B</td> <td>4</td> <td>16</td> <td>no</td> <td>3</td> </tr> <tr> <td>K8B</td> <td>8</td> <td>0</td> <td>no</td> <td>3</td> </tr> </tbody> </table> | Version | Probes       | Sensors | Audio/Visual   | Relays | Communication | K4 | 4 | 16 | yes | 3 | (1) RS-232<br>(1) TCP/IP<br>(1) Expansion Port<br>(1) SD Card slot | K8 | 8 | 0 | yes | 3 | K4B | 4 | 16 | no | 3 | K8B | 8 | 0 | no | 3 |
| Version                        | Probes   | Sensors | Audio/Visual | Relays  | Communication  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| K4                             | 4  | 16      | yes          | 3       | (1) RS-232<br>(1) TCP/IP<br>(1) Expansion Port<br>(1) SD Card slot |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| K8                             | 8  | 0       | yes          | 3       |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| K4B                            | 4  | 16      | no           | 3       |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |
| K8B                            | 8  | 0       | no           | 3       |  |        |               |    |   |    |     |   |  |    |   |   |     |   |     |   |    |    |   |     |   |   |    |   |

Specifications subject to change without notice, verify with manufacturer.

  
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