Delivery Defender Lite
Universal Remote Display

Part Number: DDL-5

Description

Delivery Defender Lite™ (**DDL**) is a universal remote overfill alarm for up to five tanks in a compact NEMA4X enclosure. This unit can connect to our PROTEUS® line of ATGs along with most industry standard Tank Gauging systems. The **DDL** provides delivery and alarm indication outside, where your fuel provider can observe current tank conditions. Equipped with high intensity sunlight visible LED indicators, high decibel horn/general alarm light, the **DDL** provides critical information to the filling operator.

How it works:

When a tanker pulls on to the site the driver can easily see the illuminated green light, indicating the **DDL** is functioning normally. The driver can then test functionality by holding the push button for 3 seconds. If all indicators and horn activate and the "System Normal" light remains lit the driver has peace of mind that the system is operable.
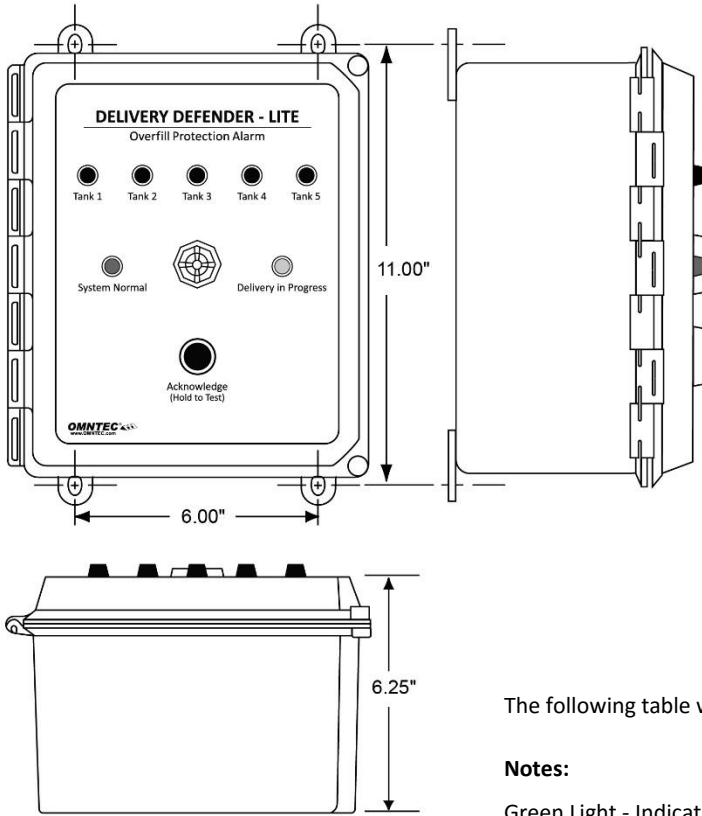
Providing enhanced delivery monitoring, once a drop has started, the **DDL's** "Delivery In Progress" light, along with the Tank(s) light(s) receiving the delivery will start to flash and continue until the delivery is complete.

If the overfill level is reached the Horn and Light will sound and the Tank(s) light(s) will switch to continuously on. Should a driver begin fueling a tank that is already in a high level state the **DDL** will respond by reactivating the general horn and light.

Features

- Sunlight visible LED indicators
- Easy to install
- Delivery in Progress Indicator
- Dedicated High Level Indicators Per Tank
- General Alarm Horn and Light
- Re-Alarms upon attempt to refill if in High Level
- Wireless Option
- Connects to any industry standard ATG
- NEMA 4X
- Adjustable Horn
- RS232 Interface

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Specifications	
Input Power:	100-240 VAC +/- 10% 50/60 Hz 60 watts
Weight:	6 lb.
Dimensions:	(W) 9" x (H) 10.5
Communications:	RS232 9600 Baud, 8 Data Bits, Parity None, 1 Stop Bit
Accessories:	**WRS-232** Wireless RS-232 link, includes both tank gauge and remote transceivers **WRS-232R** Wireless RS-232 repeater for extending WRS-232 wireless reach **RD-232C-75** 75 feet RS232 cable **C232-422-RD7CTS** RS-232-422 booster kit to increase distance of RS-232 output
Approvals:	UL-508 listed

Specifications subject to change without notice, verify with manufacturer.

The following table will explain the functions of the **Delivery Defender Lite™** *(See Figure 1)*.

Notes:

Green Light - Indicates power available and there is proper communications with the ATG.

Amber Light - Flashes during delivery in progress.

Red Tank Lights – Flash when a tank is receiving a delivery. Turns steady when a tank has reached high level and remains illuminated until the condition is satisfied.

General Horn/Light - Activates upon high level, overfill, max height, probe time out or ATG communication failure. IMPORTANT!!!! High level and overfill alarm thresholds are received and programmed at the main ATG.

Acknowledge Button - Acknowledges alarm conditions by deactivating general horn/alarm light. If pressed and held for 3 seconds, tests all lights and horn.

	Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Horn	System Normal	Delivery in Progress
Normal Condition							🟢	
Pushbutton (hold for 3 seconds to test)	🔴	🔴	🔴	🔴	🔴	🔴	🟢	🟡
Receiving Delivery	🔴 (flashing)	🔴 (flashing)	🔴 (flashing)	🔴 (flashing)	🔴 (flashing)		🟢	🟡 (flashing)
High Level Alarm	🔴	🔴	🔴	🔴	🔴	🔴	🟢	
Overfill Alarm						🔴	🟢	
Communication Loss	🔴	🔴	🔴	🔴	🔴	🔴		

Figure 1