

# Options

## Guard Level® DAC, Deck Alarm Solar Powered Alarm Monitoring Panel:

Composite NEMA 4X, IP67 enclosure with individual inputs for each alarm sensor gives clear indication which tank is in alarm. Includes audible and visual deck alarms. Solar panel regulator and deep cycle batteries. Panel includes Intrinsically Safe barriers and should be mounted in an area classified SAFE.



## Guard Level® 07324 Twin-2A, High Level and Overfill (HH) Alarm Sensors:

The Twin 2A provides the vessel (2) alarm points to assist Tankerman in loading the barge. The alarms are independent of each other and indicate high (95%) level is attained, and Overfill (98%) level indicating overfill conditions exist. This is the most important single contributor to clean waterways and safe loading conditions. This unit protects lives and the environment. Considered a "simple apparatus," it is designed to be located in the hazardous area protected by IS (Intrinsically Safe) barriers on Guard Level® Deck alarm cabinet or Shore terminal IS approved cabinet.



## Guard Level® DWSG:

The double wiper round sight glass provides a "window" view in the tank while loading/discharging. A Visual Gauge tree (VGT) usually accompanies the Sight glass. The VGT has affixed flags every Six Inches (6") indicating level of cargo. Those concerned with the load "through this Sight Glass" can view the load conditions and level. The Sight Glass through the viewing process provides a "Visual" only of load condition. An attached wiper blade (both bottom and top of glass) cleans the glass by manually turning the wiper blade handle. This is a basic function for viewing cargo level height. OPTIONS: Single wiper (Chemical), Gas free venting (Hinged).



## Guard Level® 07324 VGT Visual Gauge Tree

The Visual Gauge tree provides level indication through a Bergan Sight glass. Flags placed every Six Inches allows for cargo level to be indicated. Visual Gauge Tree can be ordered to display Innage (quantity in Tank) or Ullage (Free space remaining in tank).



## Guard Level® PTU, Portable Tester Unit:

This is a handy battery powered tester that plugs into the API shore connection and allows the tankerman to test the level alarms before tank loading. Includes LED lights (green for safe and red for alarm as well as a piezo buzzer).



## Guard Level® PAU, Portable Alarm Unit:

This is an alternative to fixed alarm control panel and allows the tankerman to get audible and visual alarms on the barge when any one of the series connected alarm sensor is activated. Includes built-in 2 ea. 12v 7Ah batteries that require recharging.



**Floats:** We can offer lighter weight floats for LPG and Ammonia tanker applications.

**Custom options:** At Bergan we pride ourselves in solving YOUR PROBLEM so give us a challenge.

# Guard Level® System Cargo Monitoring and Alarm System For Inland Tank Barges



**The complete system provider from the industry leader.  
Now with available valve control**

- Highest Quality and Competitive prices
- Complies with U.S. Coast Guard Regulation 46 CFR 39.20-3, 39.20-7, 39.20-9, 153.408, and 153.409
- ABS Type Approved
- Simple and rugged designs with stainless steel throughout
- Unmatched reliability with 40 year track record

Specifications subject to change without notice.  
Ian-Conrad Bergan, LLC. reserves the right to constantly improve product performance.

Guard Level®, CargoRadar®, Bergan Tank Control,™ Bergan Logo are trademarks of Ian-Conrad Bergan, LLC.  
Copyright 2010



**Ian-Conrad Bergan, LLC.**  
1001 East Belmont St  
Pensacola, Florida 32501, U.S.A.  
Phone: 850-434-1286 Fax: 850-434-1246  
Web: [www.bergan-blue.com](http://www.bergan-blue.com)



# The Guard Level® System

# For Inland Tank Barges

**Guard Level® 07234MDS  
Magnetically Coupled Dipstick**  
Provides visual indication of the liquid level when within 1.0 meter (3.28 feet) of the tank top. Tri-color carbon reinforced gauge rod with built-in specific gravity scale. Complies with 46 CFR 39.20(-3b). Option: High Temp version



**Guard Level® DFG  
Digital Float Gauge**  
Intrinsically Safe  
High absolute accuracy  
No drift  
No calibration  
Integral front lit LCD display

Ullage displays feet, and fractional inches for easy on deck comparisons with portable MMC/ Hermetic tape machines. (1/4" increments)

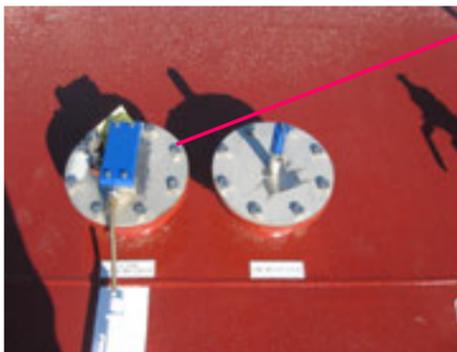
Innage can also be displayed with option for tank temperatures and tank pressure

Complies with 46CFR 39.20-3 (a) in lieu of or in addition to sight glass and gauge tree

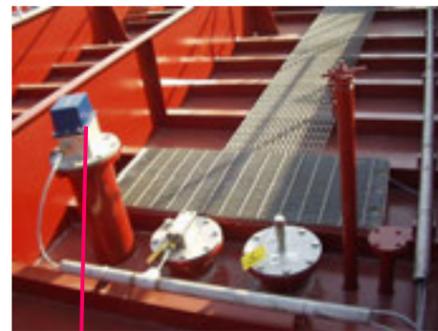
**Option:** Installed 2" UTI flange  
Integral tank pressure sensor  
Integral digital tank temperature sensors

**ABS, DNV, LR, GL, BV**

**Guard Level® 07324TWIN-2A  
Independent High Level and Overflow Alarm Sensor**  
Built-in test rod for function test prior to loading. Electrical parts can be serviced when tank is full and inerted. Complies with 46CFR 39.20-9(b). **Option:** Installed 2" UTI flange  
High Temp version  
Lighter weight float for ammonia and LPG  
Vapor Guard™ test rod sealer



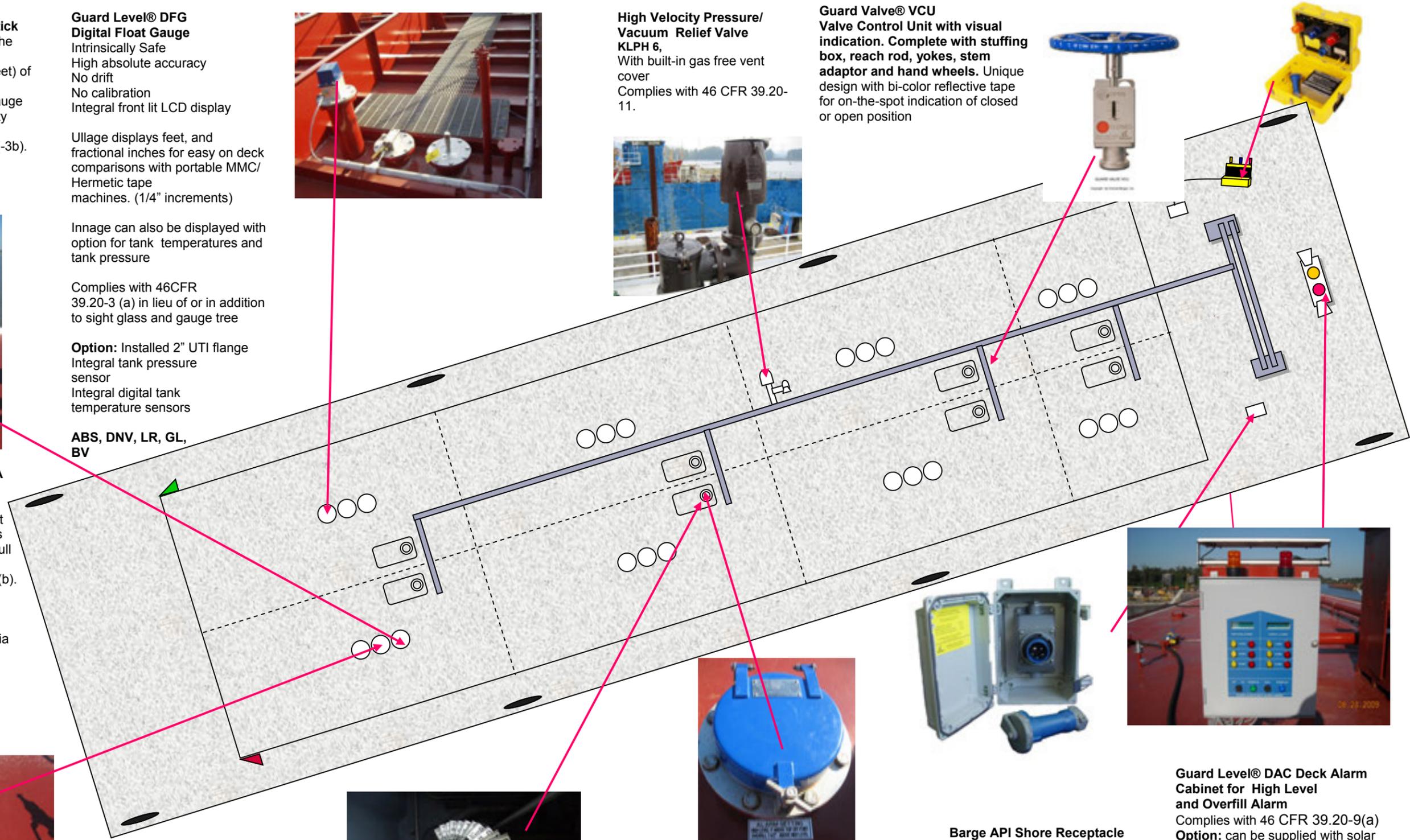
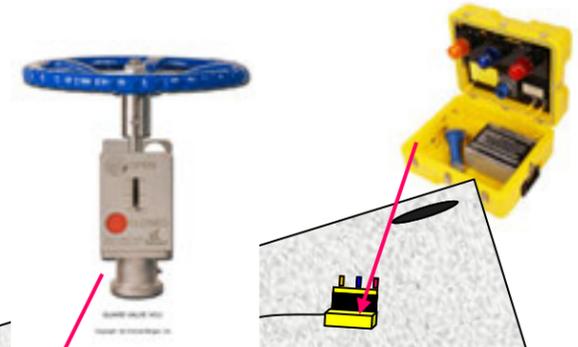
**Guard Level® Gauge Tree  
Radial Arm Gauge Tree**  
Complies with U.S. Coast Guard Regulation 46 CFR 39.20-3(a) when used with Guard Level® DWSG Sight Glass. Available in full depth and one meter.



**High Velocity Pressure/  
Vacuum Relief Valve  
KLPH 6,**  
With built-in gas free vent cover  
Complies with 46 CFR 39.20-11.



**Guard Valve® VCU  
Valve Control Unit with visual indication. Complete with stuffing box, reach rod, yokes, stem adaptor and hand wheels.** Unique design with bi-color reflective tape for on-the-spot indication of closed or open position



**Guard Level® DWSG-8  
Double Wiper Sight Glass**  
For continuous observation of the cargo tank level. Complies with 46 CFR 39.20-3(a).



**Barge API Shore Receptacle**  
For connection to shore facility Overflow Control System. Complies with 46 CFR 39.20-9(b) (2&8) Also used for PAU connection.



**Guard Level® DAC Deck Alarm  
Cabinet for High Level  
and Overfill Alarm**  
Complies with 46 CFR 39.20-9(a) **Option:** can be supplied with solar power array

