PRODUCT DATA SHEET

GROUND PERMISSIVE INTERLOCK

Dual and Simplex Indication

SPARTAN CONTROLS

A proven, easy to use, and reliable ground clamp monitoring system.

Fluid transport vehicles carrying flammable liquids need to be properly grounded before hose connections are established and throughout the loading operation. Spartan Controls' ground permissive interlock (GPI) ensures that tanker trucks or rail tank cars are properly grounded for optimal safety in loading operations. Ensuring proper grounding to safely dissipate static electricity will reduce the risk of fires and explosions caused by uncontrolled static arcing.

- During operation a green indicator light illuminates to confirm that a proper grounding connection has been made. A red indicator light illuminates when there is a ground fault
- An integrated relay can be used for remote verification and to monitor the grounding connection throughout the loading operation
- Trigger alarms using beacons and/or horns to alert operators on loss of ground and automatically shut down the loading process when integrated into Spartan Controls FB107 TUL, TruckVue[™], or RailVue[™] loading systems
- Approved with intrinsically safe grounding connections for use in Class I, Division 1
- (2) or (4) pilot indicator lights
- (1) heavy duty ground clamp with 25 feet of 14/3 SOOW cord







Application

As product flows, or as tanker trucks and rail cars move, the friction with their surroundings will generate static electricity. This issue is exacerbated by rubber tires which insulate trucks from the ground. The different ground potentials will try to equalize by arcing through the air to the nearest ground sync. In a loading or unloading situation this may happen between the hose and the truck connection where flammable vapors are most likely to be.

By ensuring a ground connection to the vehicle before loading or unloading begins the ground clamp eliminates the potential for arcing to happen.

Technical Specifications

Environment	-40° to 122°F -40° to 50°C
Dimensions	10.5" x 11.5" x 7.5" 267mm x 267mm x 190mm
Power Requirements	GPI-24VDC: 24 VDC, 60mA GPI-120VAC: 120 VAC 50/60 Hz
Area Classification	Class 1 Division 1, Groups B,C,D, T3
Connections	(2x) ¾" NPT, (1x) ½" NPT
Indicators	Green - Ground Complete Red - Ground Fault



Ordering

Model	Description	Part #
GPI-24VDC-2LT	24 VDC with one set of indicator lights	11358536
GPI-24VDC-4LT	24 VDC with two sets of indicator lights	11358569
GPI-120VAC-2LT	120 VAC with one set of indicator lights	11358568
GPI-120VAC-4LT	120 VAC with two sets of indicator lights	11354278
GPI-120VAC-4LT-2	120 VAC with two sets of indicator lights and two ground clamps	11358570