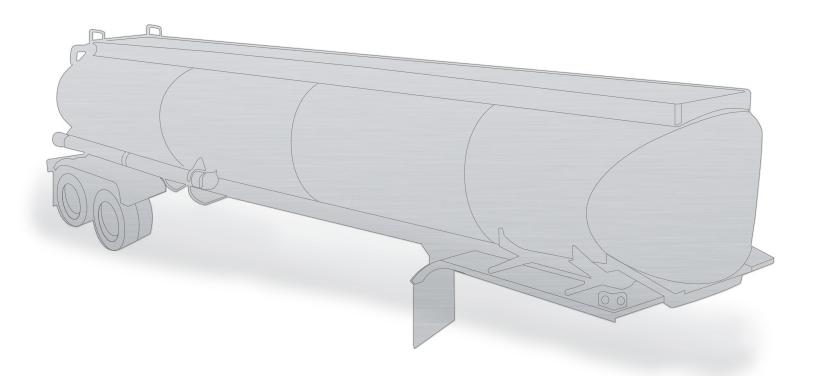
## Overfill Prevention, Grounding and Vehicle Identification Systems



## **Electronic Tank Truck Catalog**





#### The Scully Difference

Choosing the right equipment supplier can make a significant difference to your operations and your bottom line Scully is the original brand that pioneered and patented the equipment used today for tank truck overfill prevention, retained product sensing, static ground proving and vehicle identification. For over 85 years, Scully has been committed to providing you with the best value in the industry through quality, reliability, safety and service.

#### **Quality You Can Trust**

Quality is our passion. We take great pride in designing, building and servicing products made of the highest quality materials, with the best processes and extensive testing. To ensure this, we are a vertically integrated company with engineering, manufacturing, customer and technical service- all under one roof so we can maintain the quality levels that you deserve. We are a family company that won't put our name on our products unless they meet our stringent criteria and surpass your expectations.

#### Reliability You Can Depend On

Our products are made to last. Period. In fact, they often outlast the tanks and vehicles where they are installed. It's the reason transport companies insist on Scully and won't accept substitutes. You can find products that cost less up-front, but at Scully we know that down-time and liabilities are costly and the more important criteria is the annual cost of ownership. Specify Scully for dependable, efficient performance.

#### Safety To Protect Your Employees And Your Operations

We will never compromise on safety. Our systems are designed to protect people and the environment from catastrophic spills and explosions. There is no margin for error. That's why we design and test our products to the latest industry standards and why our overfill prevention products incorporate our original patented self-checking Dynacheck® circuitry. Our overfill prevention systems have the longest running safety record in the industry. Why settle for less?

#### World Class Service To Keep Your Fleet On The Road

Downtime equals lost profits. We are serious about expert service- helping you install, troubleshoot and maintain our products throughout the lifetime of ownership. Our highly skilled service technicians can assist you on the phone 24 hours per day, seven days per week and our experienced applications engineering, field sales and customer service team are actual people who are here to assist you.

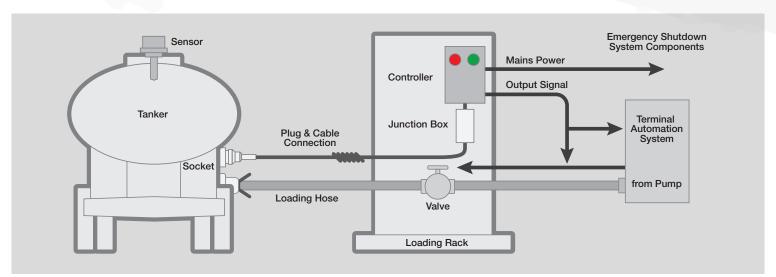
#### Principle Of Overfill Prevention When Specifying Truck Equipment:

**Plug:** The plug color designates connection interface to truck tank socket. Blue – optic 5-Wire signal with 3 J-slots connection. Green – thermistor 2-Wire signal with 2 or 4 J-slots connection. A black plug is common in Europe and used in thermistor 2-Wire installs but not typically seen in US terminals. The blue plug has 6 pins for optic 5-Wire signals, the green plug has 8 pins (2 J-slots) or 10 pins (4 J-Slots) for thermistor 2-Wire signal. Note that thermistor is an industry term as the sensor technology used can be thermistor or optic.

**Controller:** A failsafe overfill prevention device at the terminal. There are three typical types of controllers:

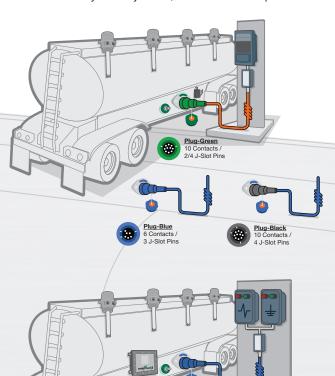
- 1. A single-point controller that interfaces only to a one compartment trailer (ie. One overfill 2-Wire sensor)
- A multi-point controller that interfaces to a 5-Wire sensor trailer (multiple 5-Wire sensors)
- 3. An auto-detect multi compartment controller that interfaces to trailers with either 2 or 5-Wire sensors onboard.

Depending on the type of controller different truck equipment options are available.



#### **General Bottom Loading Configuration**

The following is a guide and reflects the most common equipment configurations in the liquid transport industry. When determining the equipment that's needed for a tank, there are multiple factors to be considered and there are many more possible equipment combinations other than what is outlined in these diagrams. Please contact us with any questions or unique situations that you may have, and we can help determine a system that is right for you.



#### At the Terminal:

#### **Auto-Detect Multi-Compartment Controller**

Interfacing The Truck: *IF* an 8 or 10 Pin Green Plug
Truck Requirements: *THEN* 10 Pin Green Truck Socket,
Dummy Sensors and Ground Bolt, 2-Wire Sensors

Interfacing The Truck: IF a 6 Pin Blue Plug

Truck Requirements: THEN 6 Pin Blue Truck Socket,

Ground Bolt, 5-Wire Sensors

Interfacing The Truck: *IF* a 10 Pin Black Plug

Truck Requirements: *THEN* 10 Pin Green Truck Socket,

Dummy Sensors and Ground Bolt, 2-Wire Sensors or 6 Pin Blue Truck Socket, Ground Bolt, 5-Wire Sensors



Interfacing The Truck: Blue Plug (3 J-Slots)
Truck Requirements: Blue Optic 5-Wire Socket,

a 5-Wire Sensor Per Compartment

Optional: Intellicheck®3 Truck Controller for Onboard Indication

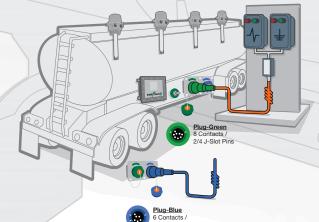


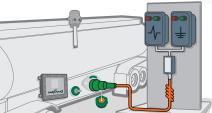
#### **Either Auto-Detect or Multi-Point Controller**

(Guarantees universal compatibility at any terminal)

Interfacing The Truck: Either any Green or Blue Plug

**Truck Requirements:** Duocept Socket and Intellicheck®3, either 2 or 5-Wire sensors (same in all compartments)





At the Terminal: Single-Point Controller

Interfacing The Truck: Green Plug (2 or 4 J-Slots)

Truck Requirements: Green Thermistor 2-Wire Socket.

2-Wire Overfill Sensor

Optional: Intellicheck®3 Truck Controller for Onboard Indication

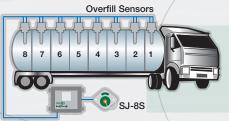
## Scully Intellicheck®3

The safest and most advanced tank trailer overfill prevention and retained product monitoring system. It saves time and money by reducing down-time and ensuring safe, dependable loading operations.



- Tank vehicle mounted control unit displays overfill prevention, retained product, and fault condition status for safe loading and ease of troubleshooting.
- Enhanced programming and diagnostics for quick installation and troubleshooting.
- Features Dynacheck®, automatic and continuous self-checking circuitry for fail-safe operation.
- Upon detection of a static condition, the IntelliCheck®3 system shuts down its outputs and ceases loading operation.
- Retained product monitoring feature helps prevent product mixing and requires driver acknowledgement of retained product before loading can occur.





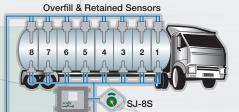
#### Overfill 8

Overfill 8 Control Monitor	09562
Overfill 8 Replacement Module	09563
Intellicheck®3-R Upgrade Kit for	Overfill 8 09584

Intellicheck®3 Overfill 8

#### **Overfill & Retained**

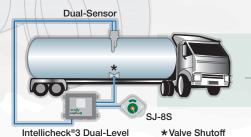
Overfill & Retained Monitor 09566 Overfill & Retained Replacement Module 09567 Intellicheck®3-R Upgrade Kit for Overfill & Retained 09585





Intellicheck®3 Overfill / Retained



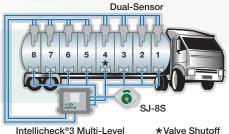


#### **Dual-Level**

**Dual-Level Level Monitor Dual-Level Replacement Module** 

09578 09579

Multi-Level Multi-Level Level Monitor 09540 Multi-Level Level Monitor w/Bypass 09540-BYP





Intellicheck®3 Multi-Level



#### **Dual-Level Sensors** SP-TO, 7" with NPT Holder 092000234 SP-TO, 12" with NPT Holder 092000235 SP-TO, 15" with NPT Holder 092000236 SP-TO, 7" Replacement Sensor 092000268 SP-TO, 12" Replacement Sensor 092000269 SP-TO,15" Replacement Sensor 092000270 NPT Replacement Holder 092000275

## Scully CONNECT™ Plus Sensors

The Scully Connect™ Plus Sensor is an advanced tool-less overfill prevention sensor that allows for quick, easy and error-free installation of your overfill prevention system.

- Time Saving Installation eliminates wiring errors since no wire crimping is required.
- No Tools Required when on top of a truck installing, removing, or replacing the sensor.
- IP69K Ingress Protection Rating. No ingress of dust and protection against close range, high pressure water spray down.
- External cap levers dual axis assembly now enable vertical rotation for easy installation and removal in tight spaces.
- Corrosion-Resistant Aluminum Alloy Levers stand up to harsh environments on the top of tank trailers.
- Multiple Mounting Base Options, including a threaded through hole version or a swivel base design.



#### Sensor Opening & Adjusting







Contact Scully application team to configure a Scully Connect Plus kit. Information required about your tank or trailer include: number of compartments, type of sensors (2-Wire versus 5-Wire), distance between man-lids per compartment and between compartment one man-lid and the onboard controller or socket. A kit will be configured to your requirements and quoted for your reference.

## 2-Wire & 5-Wire Optic Sensors

Scully 2-Wire and 5-Wire Optic sensors are purpose-built for liquid petroleum product overfill prevention and point level detection.

 Maximum safety with Dynacheck®— Automatic and continuous selfchecking circuitry when used with Scully electronic rack and vehicle onboard monitoring systems.



- Scully's field-proven electro-optics technology.
- Adjustable sensing level.
- Instant-On<sup>™</sup>—Instant permissive signal. No warmup time required.
- Quick purging of liquid—"fast" repermit as product level drops below the sensing point.
- Fully compatible with all Scully thermistor controllers.



#### 2-Wire Sensor

SP-TO/MHC(MC)

7" Two-Wire Optic Sensor w/NPT Holder 12" Two-Wire Optic Sensor w/NPT Holder 15" Two-Wire Optic Sensor w/NPT Holder 09408L1 09413L1 09416L1

#### SP-TO/MHCF(MC)

7" Two-Wire Optic Sensor w/Flanged Holder	09407L1
12" Two-Wire Optic Sensor w/Flanged Holder	09412L1
15" Two-Wire Optic Sensor w/Flanged Holder	09415L1



#### SP-FU/MHC(MC)

7" Five-Wire Optic Sensor w/NPT Holder	09208L1
12" Five-Wire Optic Sensor w/NPT Holder	09213L1
15" Five-Wire Optic Sensor w/NPT Holder	09216L1

#### SP-FU/MHCF(MC)

7" Five-Wire Optic Sensor w/Flanged Holder	09207L1
12" Five-Wire Optic Sensor w/Flanged Holder	09212L1
15" Five-Wire Optic Sensor w/Flanged Holder	09215L1



## Sockets

Scully sockets are part of a complete vehicle mounted overfill prevention and grounding systems. The style of plug at each loading terminal that your vehicles load should be considered to ensure a compatible connection. Truck-mounted, they connect to the Scully IntelliCheck® or Load Anywhere® onboard monitor and/or Scully sensors and the terminal loading rack overfill monitor via the terminal plug.



**Single Sockets** 

SJ-6W Optic Socket, WOGA Pattern,	
API Optic Standard	07974
SJ-6SO Optic Socket, Scully Pattern	07973
SJ-6X Optic Socket, SAE J560 Pattern	08199
SJ-8S Thermistor Socket, API Thermistor Standard	07716
SJ-6S Thermistor Socket, API Thermistor Standard	07720
SJ-6 Thermistor Socket, SAE J560 Pattern	07681
SJ-4D Pole Pattern Socket	07707
SJ-4R 4 Pin Truck/Rack with Box	07644
SD-5E Five Element Electronic Dummy	08542



DuoCept W/B, WOGA Optic and Scully Thermistor Interface Connectors



DuoCept W/B, w/T.I.M., WOGA Optic and Scully Thermistor Interface Connectors

09061

## Super T.I.M.



The Scully Truck Identification Module™ (SUPER T.I.M.®) provides a unique serial number to the Vehicle Identification Prover® (V.I.P.®) system control unit feature of the Intellitrol®, allowing the truck to communicate with the terminal during loading. The system is used in conjunction with your Scully tank overfill prevention and vehicle static grounding controls.



Truck Identification Module® (T.I.M.®)

08836

## Grounding

If you load at terminals where the Scully Groundhog is incorporated with the existing Scully overfill prevention system, you need a Scully ground bolt on your vehicle. The bolt is mounted directly to the vehicle frame and wired to the existing truck-mounted Scully socket(s). This allows you to perform only one connection for overfill and ground verification.







Ground Ball	08274
Ground Bolt	08560
Ground Bolt with M20 Cable Gland	09011

## **Retained Sensors**





The Scully SP-IR retained product sensor is designed to sense residual (retained) product in the bottom of a tank trailer compartment. It is intended for use as part of the Scully IntelliCheck® overfill & retained product monitoring system. When properly installed at the lowest point in the compartment, using the Scully supplied weld coupling, the sensor will detect approximately 3/8"-1/2" of residual product in the compartment.

#### SP-IR-RTND

Standard Scully Retain Optic 2-Wire Sensor w/6061-T651 Aluminum Weld Coupling

08819

#### SP-IR-RTND

Standard Scully Retain Optic 2-Wire Sensor w/Carbon Steel Weld Coupling

08819CST

#### SP-IR-RTND

Standard Scully Retain Optic 2-Wire Sensor w/6061-T651 Aluminum Weld Coupling Extra Length

08956

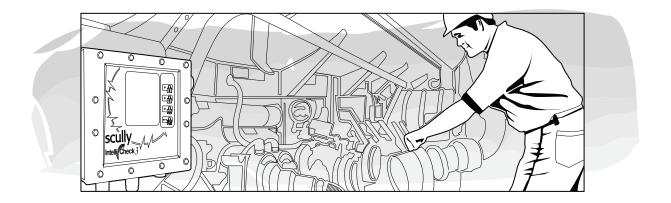
### **Universal Truck Tester**

The most advanced and comprehensive road tanker tester available. It checks the operation of road tanker overfill prevention, and self-proving earthing systems. Complete diagnostics limit the expense of downtime. The tester is compatible with Scully Intellicheck®, Load Anywhere® and independent Scully optic and thermistor road tanker sensors.





# Setting Standards in Safety & Dependability Since 1936



For more than 85 years Scully has been engineering and building products to the highest safety and reliability standards. We have direct sales and service personnel in North America, Europe, the U.K., India and are represented in over 50 countries.





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