

INTELLICHECK®

Scully's IntelliCheck® System

is the most advanced secondary overfill protection and retained product monitoring system in tank truck loading operations. Featuring Dynacheck® - automatic and continuous self-checking circuitry, the controller, wiring, connections and sensors are checked for faults up to 30 times per second. Only IntelliCheck offers system diagnostics this extensive.

Complete Overfill Prevention and Retained Product Monitoring System with Complete Loading Rack Compatibility.



IntelliCheck is a state of the art point level detection system that provides:

- Overfill prevention and retained product monitoring in one compact enclosure.
- Scully Dynacheck, automatic and continuous self-checking circuitry.
- The ability to use existing Scully five-wire optic or Scully two-wire optic overfill sensors.
- Complete visual and diagnostic display of overfill sensors' status. Will not permit loading under any fault or wet overfill sensor condition.
- Monitoring of up to 8 compartments.
- Complete compatibility with all Scully loading rack overfill prevention equipment.
- Durable construction for long lasting dependability.
- Easy installation with step by step instructions.
- The best technical service in the industry, with 24-hour toll-free trouble-shooting and technical assistance.
- Full communication with diagnostic information on all sensor conditions and system functions shown and explained on the monitor cover.

STANDARD FEATURES

OVERFILL PREVENTION

- Monitoring of up to 8 compartments.
- Maximum safety with Dynacheck automatic and continuous self-checking circuitry.
- Red “wet” sensor LED indicators which illuminate on high level and signal output shutdown.

DYNACHECK® SAFETY

- Dynacheck uses pulsed signals to continuously check the entire system.
- The controller, wiring, connections and sensors are checked for faults up to 30 times per second.
- If a sensor comes in contact with liquid, or in the event of a system fault, the pulsed signals cease, and the controller automatically signals for immediate shutdown of the loading operation.

COMPLETE DIAGNOSTICS AND COMMUNICATION

- IntelliCheck shows visual indication of proper operation.
- Prominent red and green status LED indicators indicate permit, Dynacheck status, auxiliary control, signals from rack, and signals to rack.
- Individual wet sensor detection by compartment, with indication of open sensor wiring, shorted sensor wiring, sensor faults and even wiring faults or a faulty connection to the loading rack controller.

RETAINED PRODUCT MONITORING

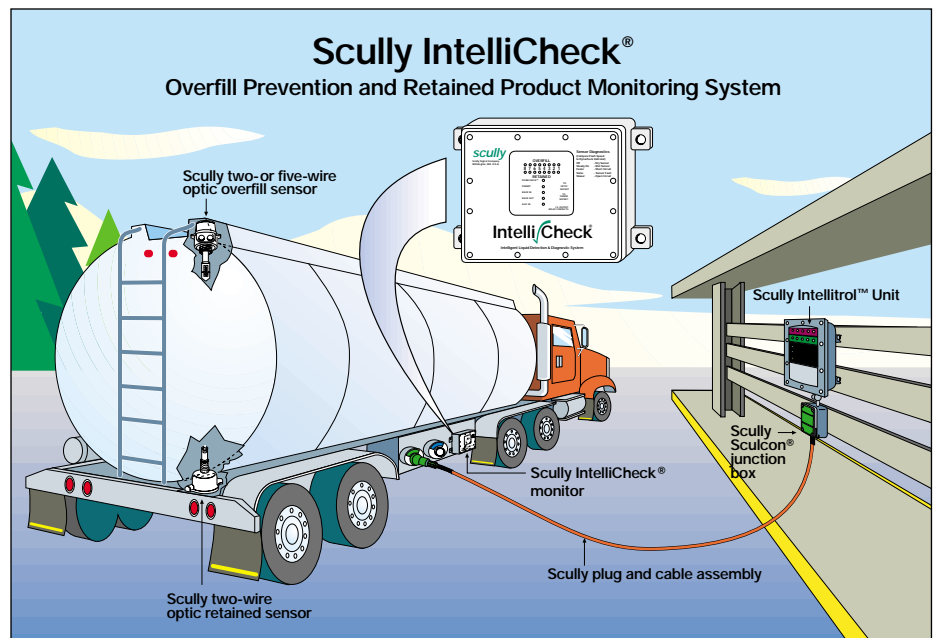
- Automatic detection with two-wire optic retained product sensors.
- Monitoring of up to 8 compartments.
- Loading is automatically locked out when product remains in a compartment.
- Driver must acknowledge the presence of retained product.
- Warns against product mixing.

ADVANCED OPTIC SENSING

- Scully optic sensors are the devices through which Dynacheck detects the presence of liquid product.
- The signal for each sensor is directly wired to the IntelliCheck monitor for verification of each compartment's status.
- Optic technology insures no warm-up time.
- One overfill and/or one retained product sensor is mounted in each compartment.

DURABLE, RELIABLE SOCKET CONNECTIONS

- Scully sockets are the vehicle mounted connectors for the rack plug.
- Feature lightweight vinyl protective caps to prevent socket corrosion.
- Captive cable attachment to prevent loss.



ORDERING INFORMATION

IntelliCheck Kits

Each IntelliCheck Kit includes one control monitor, the number of optic sensors to match the number of vehicle compartments, Scully cable, 30 crimp-on connectors, 16 compression fittings, a 1/2 amp fuse and a socket cleaner.

IntelliCheck Overfill and Retained System Kit (200 feet scully cable)	Part # for 8" Standard Sensors	Part # for 12" Extended Length Sensors
1 Compartment Overfill/Retained Kit with a 2-wire optic sensor	08361	08971
2 Compartment Overfill/Retained Kit with 2-wire optic sensors	08362	08972
3 Compartment Overfill/Retained Kit with 2-wire optic sensors	08363	08973
4 Compartment Overfill/Retained Kit with 2-wire optic sensors	08364	08974
5 Compartment Overfill/Retained Kit with 2-wire optic sensors	08365	08975
6 Compartment Overfill/Retained Kit with 2-wire optic sensors	08366	08976
7 Compartment Overfill/Retained Kit with 2-wire optic sensors	08382	08977
8 Compartment Overfill/Retained Kit with 2-wire optic sensors	08383	08978

IntelliCheck Overfill Only System Kit (100 feet scully cable)	Part # for 8" Standard Sensors	Part # for 12" Extended Length Sensors
1 Compartment Kit with a 2-wire optic sensor	08251	08961
2 Compartment Kit with 2-wire optic sensors	08352	08962
3 Compartment Kit with 2-wire optic sensors	08353	08963
4 Compartment Kit with 2-wire optic sensors	08354	08964
5 Compartment Kit with 2-wire optic sensors	08355	08965
6 Compartment Kit with 2-wire optic sensors	08356	08966
7 Compartment Kit with 2-wire optic sensors	08357	08967
8 Compartment Kit with 2-wire optic sensors	08381	08968

Control Units	Part #
IntelliCheck Overfill Monitor	08832
IntelliCheck Overfill and Retained Monitor	08818
IntelliCheck Overfill Only Replacement Module	08842
IntelliCheck Overfill and Retained Replacement Module	08841
IntelliCheck Cover Gasket	31787
IntelliCheck Cover Plexi Glass	31789
IntelliCheck 1/2 amp Fuse	26310

ORDERING INFORMATION

Installation and System Accessories	Part #
Installation kit for an IntelliCheck overfill and retained system using five wire overfill sensors which includes 200' of 11 conductor color coded cable, 60 crimp-on connectors, 32 compression fittings and a power switch	08367
Installation kit for an IntelliCheck overfill and retained system using two wire overfill sensors which includes 200' of 7 conductor color coded cable, 60 crimp-on connectors, 32 compression fittings and a power switch	08372
Installation kit for an IntelliCheck overfill only system using five wire overfill sensors which includes 100' of 7 conductor color coded cable, 30 crimp-on connectors, 16 compression fittings	08371
Mounting adapter plate for retrofitting trailers with existing monitors	31856
IntelliCheck pup connecting kit	08358
IntelliCheck Installation Video for Five Wire overfill and retained sensors, VHS format	08859
IntelliCheck Installation Video for Two Wire overfill and retained sensors, VHS format	08860
IntelliCheck Manual (minimum order of ten)	61215

Sensors	Part #
Two Wire Standard Optic Sensor with holder, SP-TO/MHC	08501
Two Wire Standard Replacement Sensor, SP-TO	22389
Five Wire Standard Sensor with holder, SP-FU/MHC	07894
Five Wire Standard Replacement Sensor, SP-FU	21500
Retained product sensor, two-wire optic with shear section and weld coupling, SP-IR	08819
Retained product sensor, two-wire optic, extended length with shear section and weld coupling, 2 ⁵ / ₈ ", SP-IR	08956

Sockets (See tech data sheet #60674 for additional information)	Part #
SJ-6S Scully Style Thermistor Socket with 8 pins, 2 J Slots with housing	07720
SJ-8S Canadian Thermistor Socket with 10 pins, 2 J Slots with housing	07716
SJ-6SO Scully Style Optic Socket, 2 J Slots with housing	07973
SJ-6W WOGA Style Optic Socket, 3 J Slots with housing	07974
SJ-6X J560 Style Optic Socket with housing	08199

Call 1-800-272-8559 and place your order today!

System Tester Information

Scully manufactures a Universal Truck Tester that checks all compartment sensors, the operation of the IntelliCheck overfill prevention system and the self-proving grounding system. Refer to technical data sheet #67252 for further information.

Approvals

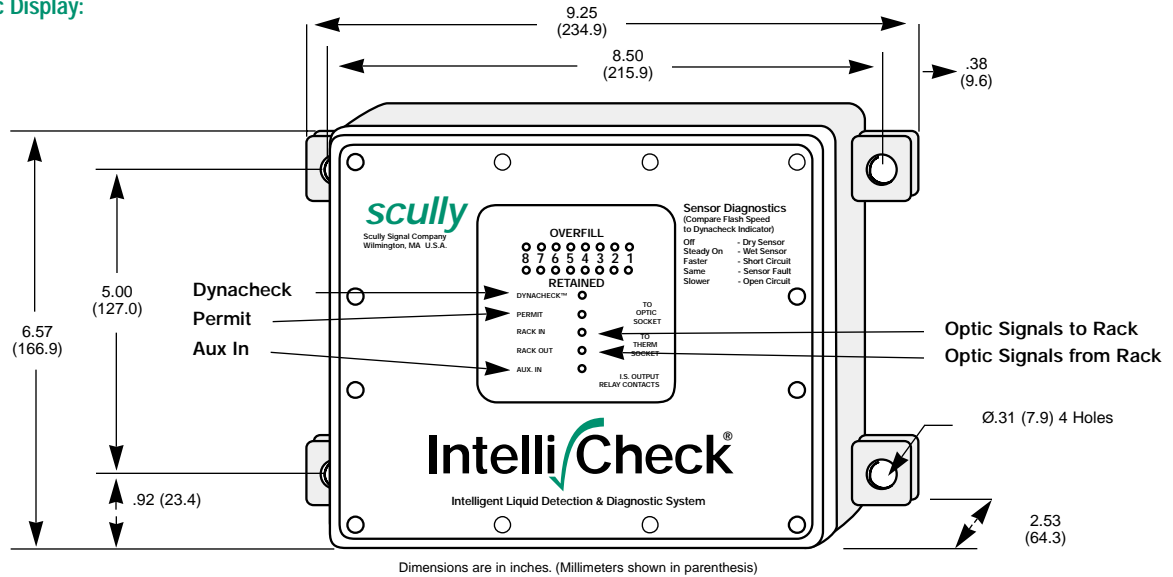
The Scully IntelliCheck Systems are approved for use in Class I, Division I, Group D hazardous locations by Factory Mutual Research and the Canadian Standards Association as part of an intrinsically safe system.

Disclaimer

The optimum safety system, taking full advantage of the exclusive Dynacheck feature and the FM approval, should be the IntelliCheck System connected to any truck terminal loading rack equipped with a Scully Loading Rack Monitor. Other manufacturers provide truck terminal loading rack equipment and tank truck systems which claim they are "interchangeable" and fully compatible with Scully equipment. Although these systems may allow you to load your trucks, they do not necessarily provide automatic and continuous self-checking of the system and equipment. Although we have designed our systems for maximum compatibility, SCULLY CANNOT GUARANTEE THE SAFETY OF OUR SYSTEM WHEN IT IS USED IN CONJUNCTION WITH AN OVERFILL PREVENTION SYSTEM FROM ANOTHER MANUFACTURER. We stress that for maximum safety the total system should consist of Scully rack equipment connected to Scully truck equipment. Any system that is not as such may violate Scully's warranty and the conditions of the FM approval.

TECHNICAL SPECIFICATIONS

Status Indicators and Diagnostic Display:



Overfill Sensor or Retained Sensor Indicators:

The red overfill sensor or retained sensor indicator light conditions are as follows:

Red Light Off - sensor is operating normally. Condition exists when the green permit indicator is on and the Dynacheck indicator is flashing.

Red Light On (not flashing) - the sensor is immersed in product. Condition exists when the green permit indicator is off and the Dynacheck indicator is flashing. This situation could also indicate a faulty sensor.

Red Light is Flashing Slowly (as compared to the Dynacheck indicator) - the sensor return line connection is open. Condition exists when the green permit indicator is off and the Dynacheck indicator is flashing.

Red Light is Flashing at Medium Speed (equal to the Dynacheck indicator) the sensor circuitry is faulty. Condition exists when the green permit indicator is off and the Dynacheck indicator is flashing.

Red Light is Flashing Fast (as compared to the Dynacheck indicator) the sensor return line is shorted to ground or is shorted to another return line. Condition exists when the green permit indicator is off and the Dynacheck indicator is flashing.

Permit:

When this green indicator is on and all red sensor indicators are off, the IntelliCheck System is ready to receive input from the loading rack terminal equipment.

Dynacheck:

When this green indicator is pulsing, the IntelliCheck module is functioning. The pulsed indication signifies the IntelliCheck System and its module are self-checking. Should the module indicate a faulty sensor, the Dynacheck indicator will continue to pulse and is used as a reference for the sensor indicators to determine fault mode.

Aux In:

This red indicator gives status of ancillary switches or connections made to the IntelliCheck System to satisfy loading operation requirements, i.e. vapor interlock switches, brake interlock, etc.

Optic from Rack:

This red indicator gives status of connection to thermistor or optic terminal loading rack controllers. The red indicator is off when connected to optic rack controllers indicating optic signal reception. The red indicator is off when connected to a thermistor rack controller indicating thermistor signal reception.

Optic to Rack:

This red indicator gives status of connection to thermistor or optic terminal loading rack controllers. The red indicator is off when connected to optic rack controllers indicating optic signal output. The red indicator is off when connected to a thermistor rack controller indicating thermistor signal reception.

Temperature Range:

Operating -40° to +140° F (-40° to +60° C)
Storage -50° to +185° F (-45° to +85° C)

Wiring Entry Holes:

1/2 NPT on FM/CSA models

Input Voltage:

11 - 28 VDC

Sensor Inputs:

Overfill: Scully two-wire optic sensors (SP-TO) or Scully five-wire optic sensors (SP-FU)
Retained: Scully two-wire optic sensors (SP-IR)

Response Time:

Less than 1/2 a second maximum after detection of wet sensor or fault condition.

Size:

Refer to diagram

Weight:

6.5 lbs. (2.9 kg.)



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