Model 1218 Electronic Tank Gauge

Application

The Morrison 1218 electronic tank gauge series monitors and displays the liquid level and/or volume of product stored in 1 to 4 aboveground storage tanks. The tank sensor utilizes a mechanical float to monitor the tank liquid level and electronically converts the tank level to display on the system console located within 1000' of the tank sensor.

System Console Features

- 4.3" diagonal color LCD display (480x272 pixels) with auto LED backlight adjustment
- System console displays liquid volume level in horizontal, rectangular, or vertical tanks
- Level units: feet and inches or centimeters (resolution to 1/10 of an inch)
- Volume units: gallons or liters
- Visual and audible alarm indication when alarm condition is activated
- 2 output relays—3 Amps @ 240 VAC
- Simple push to test or acknowledge alarm button
- Ability to test output relay functionality
- USB port functionality—software updates and download event logs
- Configuration setup via Ethernet PC connection, Ethernet Network connection, or manually at console
- NEMA 4X (IP65) indoor/outdoor weather protected, lockable enclosure
- Optional remote secondary console with operational functionality
- Optional External Input/Output Expansion Module adds 6 inputs and 6 output relays *(See 1218 External I/O Expansion spec sheet for details)*

Tank Sensor Features

- 25' and 50' models available for use with system console
- 2 dry contact, intrinsically safe inputs available in tank sensor for additional simple switch inputs
- 25' tank sensor accuracy +/- 0.3"; 50' tank sensor accuracy +/- 0.6"
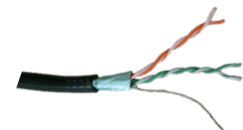- DEF compatible

Configuration Options

- User defined tank identifications, alarm levels, and input alarm labels
- Up to 4 programmable liquid level alarm set points per tank
- Audible alarm ON/OFF and Auto-Silence ON/OFF is programmable by input channel
- Output relays programmable as normally activated or normally deactivated and for desired alarm activations
- Email address book supports email and SMS/text message alarm and status notifications
- Sloped tank and manifold tank functionality available for specific parameters
- Heartbeat power indicator is user selectable

1218C

1218S

7933A Belden Cable*
***Required**

Drop Tube Float

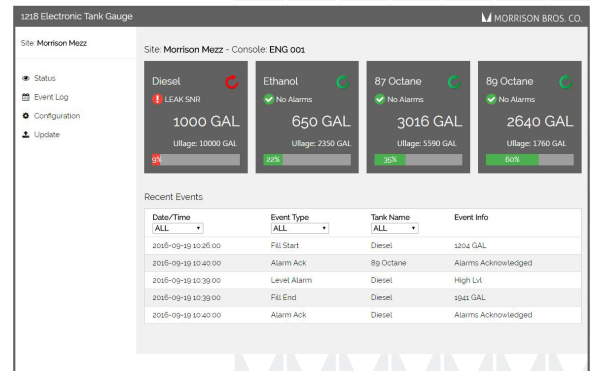**Please note that a 4" tank opening is required for models with Drop Tube Floats.*

MORRISON BROS. CO.

Network Connectivity

- Ethernet port connection (RJ-45 connector)
- TCP/IP configured with static IP address or dynamically using DHCP and local host name
- HTTPS secure web-based interface with system console for remote viewing
- Multiple display system consoles can be networked by utilizing Ethernet functionality
- Option: Cellular Gateway connection

Web-based interface

FuelCloud Connectivity

- Allows FuelCloud accounts to collect tank inventory information from any 1218 tank gauge console with internet service via FuelCloud's web portal

Business Management System Connectivity

- Modbus RTU and TCP interface configuration

Reports

- System stores an event log (up to 1,000 events) and creates a downloadable report
- Event log can be downloaded via network Ethernet connection or via USB port inside system console

Specifications

- Operating temperature range: -40°F to 140°F (-40°C to 60°C); Humidity: 0% to 95% non-condensing
- System console dimensions (H x W x D): 9⅜" x 7⅞" x 4⅝"
- 100-240 VAC +/- 10%, 50/60 Hz

Materials of Construction

- Tank sensor body*... Passivated aluminum
- Cable and float... Stainless steel cable and float
- Console enclosure... Polyester fiberglass

1218S contains the following underlined materials that will be exposed to vapors from stored product: Aluminum, stainless steel, Viton®, UHMW plastic, and steel.

7933A Belden Cable*

Multi-Conductor - Category 5e Data Tuff® twisted pair cable

- .030" industrial grade sunlight- and oil-resistant PVC jacket
- 24 AWG Bonded-Pairs solid bare copper conductors
- Polyolefin insulation
- Overall Beldfoil® shield (100% coverage) with drain wire
- Operating temperature range: -40°C to 75°C (-40°F to 167°F)

7933A Belden cable is required to connect the console to sensor(s). This cable is critical to the proper operation and safety of the system.

Approvals

UL/cUL 913; UL/cUL 508; Listing for Tank Monitoring Equipment for Ordinary Location with Hazardous Location Intrinsically Safe Input Circuits for Class I, Division 1, Group D; Florida DEP EQ-872

Item Number	Description	Wt. (lbs)
1218C-0200 AC	System console monitors up to 2 tanks	6.0
1218C-0400 AC	System console monitors up to 4 tanks	6.0
1218C-0000 AC	Remote secondary console (optional)	6.0
1218S-2500 AS	25' tank level sensor	8.0
1218S-2510 AS	25' tank level sensor with drop tube float	N/A
1218S-5000 AS	50' tank level sensor	11.0
1218S-5010 AS	50' tank level sensor with drop tube float	N/A
1218S-2539 CC	1,000' spool Belden 7933A cable	N/A
1218S-2543 CC	50' spool Belden 7933A cable	N/A
1218S-2544 CC	100' spool Belden 7933A cable	N/A
1218S-2545 CC	500' spool Belden 7933A cable	N/A