

TSM1000 Tank Monitor

with Range Extender Setup Instructions, Hazardous Locations



The power of data. **Optimized.**



WARNING: DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT
AVERTISSEMENT: NE PAS OUVRIR EN CAS DE PRESENCE D'ATMOSPHERE EXPLOSIVE



WARNING: DO NOT INSTALL BATTERY WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT
AVERTISSEMENT: NE PAS INSTALLER LES ACCUMULATEURS SI UNE ATMOSPHERE EXPLOSIVE PUEUT ÊTRE PRÉSENTE

Connect Battery and Test Connection

1

For tank farm systems with a gateway, set up gateway before connecting the monitor battery. If possible, select a spot near the tank you are installing. Connect battery cable to connector on the circuit board as shown. The monitor will wake up and indicator D206 will turn on when the monitor begins to take a reading and go off after the data is transmitted. This whole process should take under 3 minutes. If there was an error during this process, D206 will flash for 5 seconds before turning off. If this happens, please contact TankScan Technical Support.

Upon successful transmission of the data, reinstall cover and hand tighten firmly.



Note: The cover must remain on when the monitor is moved to a hazardous location.



WARNING – USE ONLY ATEK BATTERY PACK #TSTRB02000
AVERTISSEMENT – UTILISER UNIQUEMENT DES ACCUMULATEURS ATEK #TSTRB02000

Take Measurements

2

Remove any equipment from tank port to be used by monitor, if present. TSM monitor can be connected directly to tanks with a 1.5" or 2" NPT threaded opening.

3

Measure tank height **A** from inside bottom of tank to top of tank port and to top of fluid level in tank. Record and report these measurements to CCT.

Total Height: _____

Determine probe wire length using Probe Length Calculation diagram on right and record for use in step 4.

Probe Length: _____



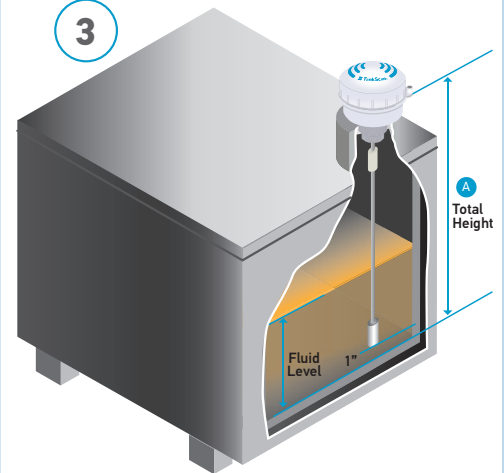
Equipment Needed:

- Tape measure
- Scissors or cutting tool
- Permanent marker

1



3



Probe Length Calculation

Using 1.5" Thread:
Probe Length = A - 1

Using 2" Thread:
Probe Length = A - 1.5

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Adjust Range Extender

- 4 Using Probe Length measurement from step 3, measure down from where wire exits TankScan monitor housing and mark Probe Length location on wire using permanent marker.
- 5 Remove end of probe wire from slot at top of Range Extender. This is necessary to adjust the wire to appropriate length.
- 6 While holding onto metal of Extender, pull on end of probe wire to feed wire through Extender until marked location on probe wire is at very bottom of Extender, as portrayed in picture 6.
- 7 Leave about 3 inches of probe wire coming out top of Extender and cut off excess. Make sure not to cut probe wire that is between Extender and TankScan monitor.
- 8 Insert end of probe wire into slot next to where wire comes out top of Extender. Pull wire's end outside of Extender, see picture 8, until tight bend is formed at Extender top.

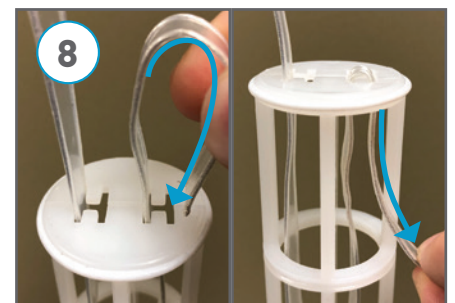
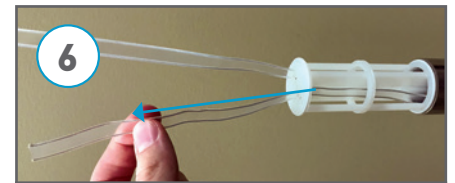
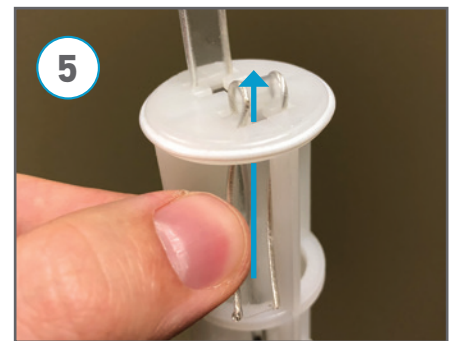
Determine if Probe Wire Guard (PWG) is Needed

- 9 For monitors installed on risers greater than 3 inches long, a PWG is required to prevent probe wire from contacting riser. Refer to included **TankScan Probe Wire Guard Installation Guide** or visit tankscan.com/support.

► **NOTE: Return to these setup instructions to complete monitor installation after Probe Wire Guard installation.**

If PWG is required but not provided as a field-installable kit, contact TankScan Technical Support to order PWG Field Install Kit before proceeding.

If PWG is not required, then proceed to step 10.



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Mount TSM Monitor to Tank

- 10** Lower probe wire with weight **gently** through tank port into tank. Position monitor over tank port and hand tighten until secure.
- 11** Seal pipe threads of monitor using product appropriate for this application prior to tightening into tank port.

Test Setup

- 12** Test monitor by swiping magnet end of supplied screwdriver along cover's rim above triangle indicator on housing base. Monitor will take a level reading and then report to ATEK Intelligence Platform (AIP)
- 13** If the monitor have been pre-provisioned, then confirm the reading is correct on AIP or optionally you can call TankScan Technical Support, 877-847-7226, to finish or confirm the reading.

NOTE: Step 13 must be completed for monitor to function properly.



Cellular

FCC ID: 2AN000NRF9160

IC: 24529-NRF9160

Rf

Contains FCC ID: MCQ-XBEE3

Contains IC: MCQ-XBEE3

Operation is subject to the following 2 conditions:

1. This device may not cause harmful interference and
2. This device must accept any interference received, including interference that may cause undesirable operation.

TankScan Technical Support

877-847-7226

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