Installation Procedure

TM7530HP Tank Monitor and Hydrostatic Pressure Sensor

IMPORTANT ⓘ **It is critical in all installations to ensure monitors' antenna is positioned vertically. This will achieve optimal signal strength, ensuring that you receive data in a timely manner and prolong the battery life of the monitor.**

PLEASE TAKE A MOMENT TO CAREFULLY READ THE INSTALLATION INSTRUCTIONS INCLUDED WITH YOUR MONITORS, AND ENSURE YOU UNDERSTAND AND RESPECT LOCAL REGULATIONS.

Do not pressure wash

WARNING Substitution of components may impair intrinsic safety. For outdoor use only. Explosion Hazard - Batteries must only be changed in an area free of ignitable concentrations. Do not open when an explosive atmosphere is present. Potential electrostatic charging hazard - wipe only with a damp cloth.

BATTERY REPLACEMENT Battery replacement must only be performed by OTODATA Wireless Network Inc. factory to maintain intrinsic safety protection of the TM7530HP. Cover shall not be opened when an explosive atmosphere is present.

GRA-0034 - EN Rev: 001

Years ago we saw an opportunity to innovate in an industry where modernization happens very slowly and costs associated to large-scale implementation made expansion and growth unaffordable for a large portion of the industry. We’re changing that.

Otodata has been a key player in the tank monitoring industry for over ten years.

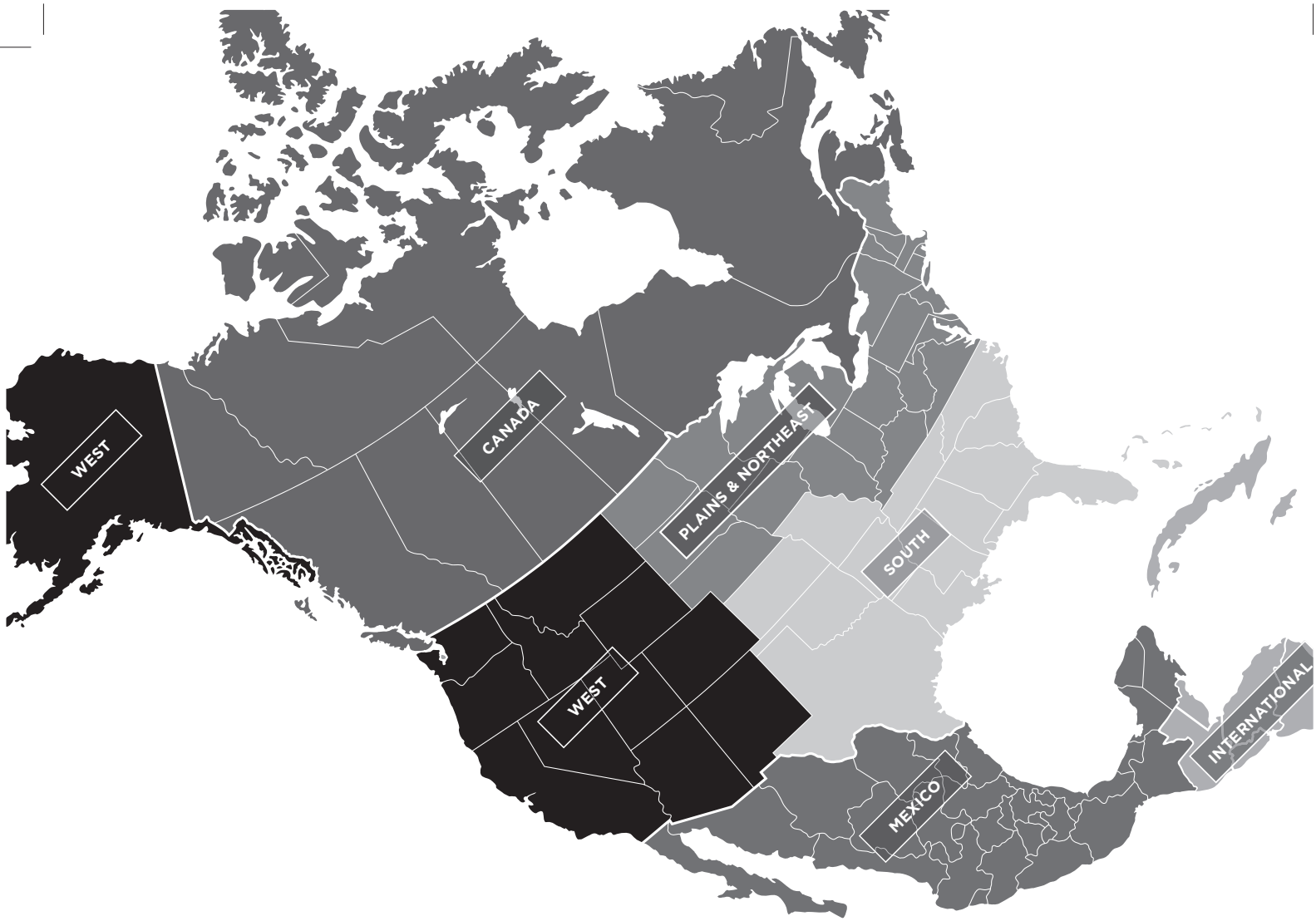
Our goal has always been to produce a monitor with very low cost of ownership - making large-scale implementation affordable for all fuel resellers.

We're proud to say we design, develop, manufacture and sell our award-winning tank monitors, management software, and mobile app to businesses all over North America.

All our monitors provide precise, extremely reliable data, carry industry leading warranties, and are compatible with all read-ready dial equipped tanks.

Thank you for your interest in our monitors.

Sincerely,
The Otodata Team



SUPPORT

1-514-673-0244 | 1-844-763-3344 (Toll-free)
support@otodatatankmonitors.com

EMERGENCY SUPPORT

1-833-529-9499
Available 24 hours, 7 days a week.

Specifications

Fuel, lubricants, oil and more. A tank monitor to suit your corporate needs.

Input

Hydrostatic Pressure transducer with differential to atmospheric pressure 0.5-4.5V non-ratiometric

Reporting & Outputs

Reporting	Tank level (5% variation)
	Low battery
	High/Excessive draw
	Fill Detection
	Temperature
Data Interface	API
	Email (to supplier and/or consumer)
	Raw data
	Online dashboard
	Client mobile app
Automated Testing	Network status
	Lead sensor status
	Battery status

Electrical Specifications

Battery Pack	Hybrid LTC	3.6 VDC	7.2 VDC

Radio Specifications

Technologies	4G, LTE CAT1, CATM, NB IOT, 3G
	Dual SIM
	Bluetooth

Environmental Specifications

Operating & storage temp. range	-40˚C to 60˚C	-40˚F to 140˚F
Relative humidity range	0% to 100%	
Enclosure rating	IP68	
Warranty	5+ years	

Option

GPS (mobile tank)

Certifications

Monitors are third-party QPS Evaluation Services Inc. Certified for use in hazardous locations

United States

Ratings Class I, Division 2, Groups C-D, T3 Class I, Zone 2, AEx ic [ia Ga] IIB T3 Gc

Standards applied:
UL 60079-0:2019 - UL 60079-11:2013

Canada

Ratings Class I, Division 2, Groups C-D, T3 Ex ic [ia Ga] IIB T3 Gc

Standards applied:
CSA 60079-0:19 - CSA 60079-11:14

Dimensions

Height	14 cm	5.5 in
Width	14 cm	5.5 in
Depth	9.5 cm	3.5 in

Applications

Level Measurement in Bio-Fuels
Monitoring of Gasoline and Diesel Fuel Tanks
Level Measurements in Ballast Tanks
Level Measurements in Oil Tanks
Monitoring of Contain Coolant for Diesel Engines
Level Measurement in AdBlue Tanks
Level Measurement in Kerosene

Characteristics

MEAS TE pressure cell, 0.5% F.S.
Survives Harsh Environments
EMI/RFI Protection
Custom level ranges from 1.5 to 16m
PUR cable lengths

Order

Otodata Monitor with Hydrostatic Pressure Sensor (Range 0-1.5ft) **TM7530HP-001**

Otodata Monitor with Hydrostatic Pressure Sensor (Range 0-4.5ft) **TM7530HP-002**

Otodata Monitor with Hydrostatic Pressure Sensor (Range 0-6.5ft) **TM7530HP-003**

Otodata Monitor with Hydrostatic Pressure Sensor (Range 0-12.5ft) **TM7530HP-005**

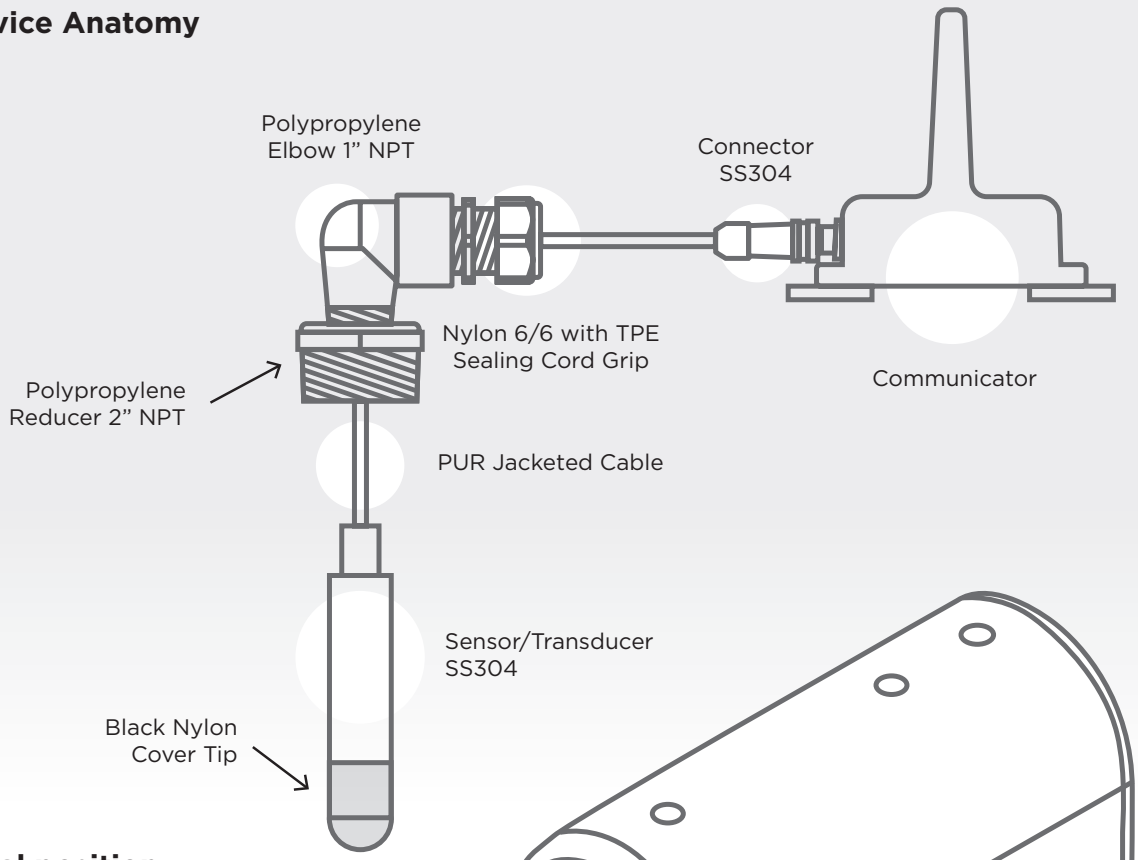
Otodata Monitor with Hydrostatic Pressure Sensor (Range 0-25ft) **TM7530HP-009**

Otodata Monitor with Hydrostatic Pressure Sensor (Range 0-32ft) **TM7530HP-011**

Otodata Monitor with Hydrostatic Pressure Sensor (Range 0-52ft) **TM7530HP-017**

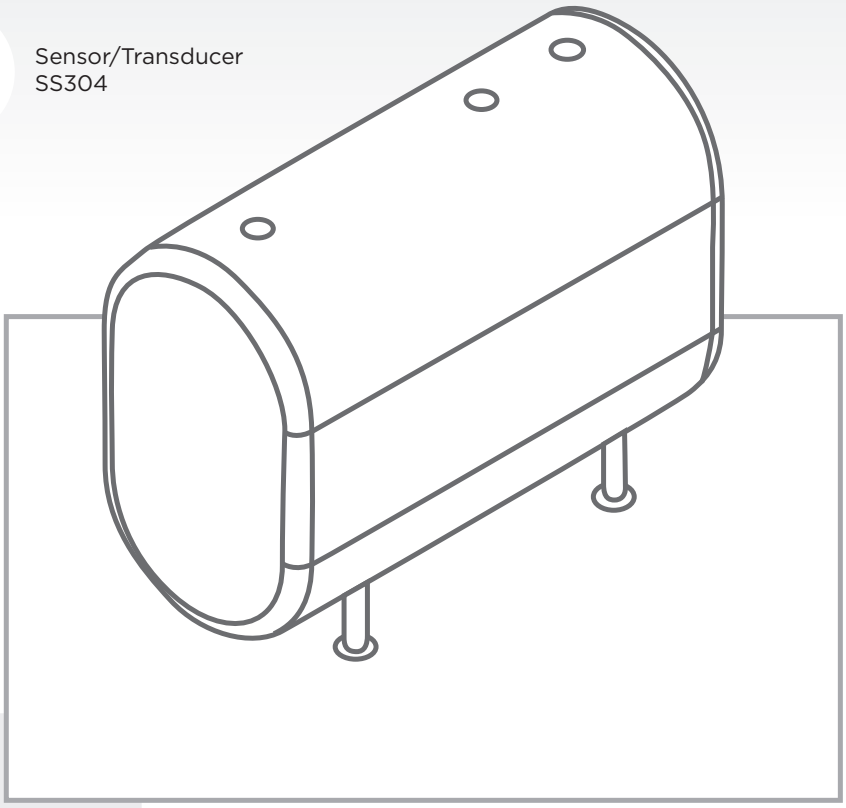
This device complies with part 15 of the FCC Rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. **This device is compliant with Industry Canada's RSS standards for license-exempt radio apparatuses.** Authorized use depends on the following two conditions: (1) the device must not create radio interference, and (2) the device user must accept all radio interference, even if this interference could potentially impair its functioning. **This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.** These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: —Reorient or relocate the receiving antenna. —Increase the separation between the equipment and receiver. —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. —Consult the dealer or an experienced radio/TV technician for help.

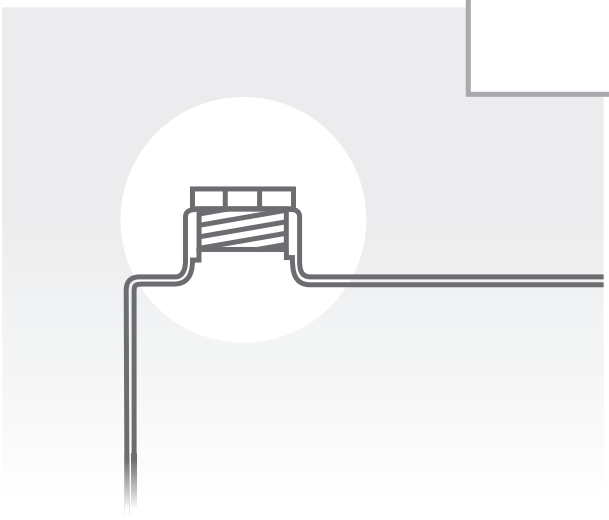
Device Anatomy



Ideal position

Choose the most convenient port on your tank, but not the one that is normally used for filling. This installation is intended to be permanent or not often removed. See following page for more information.



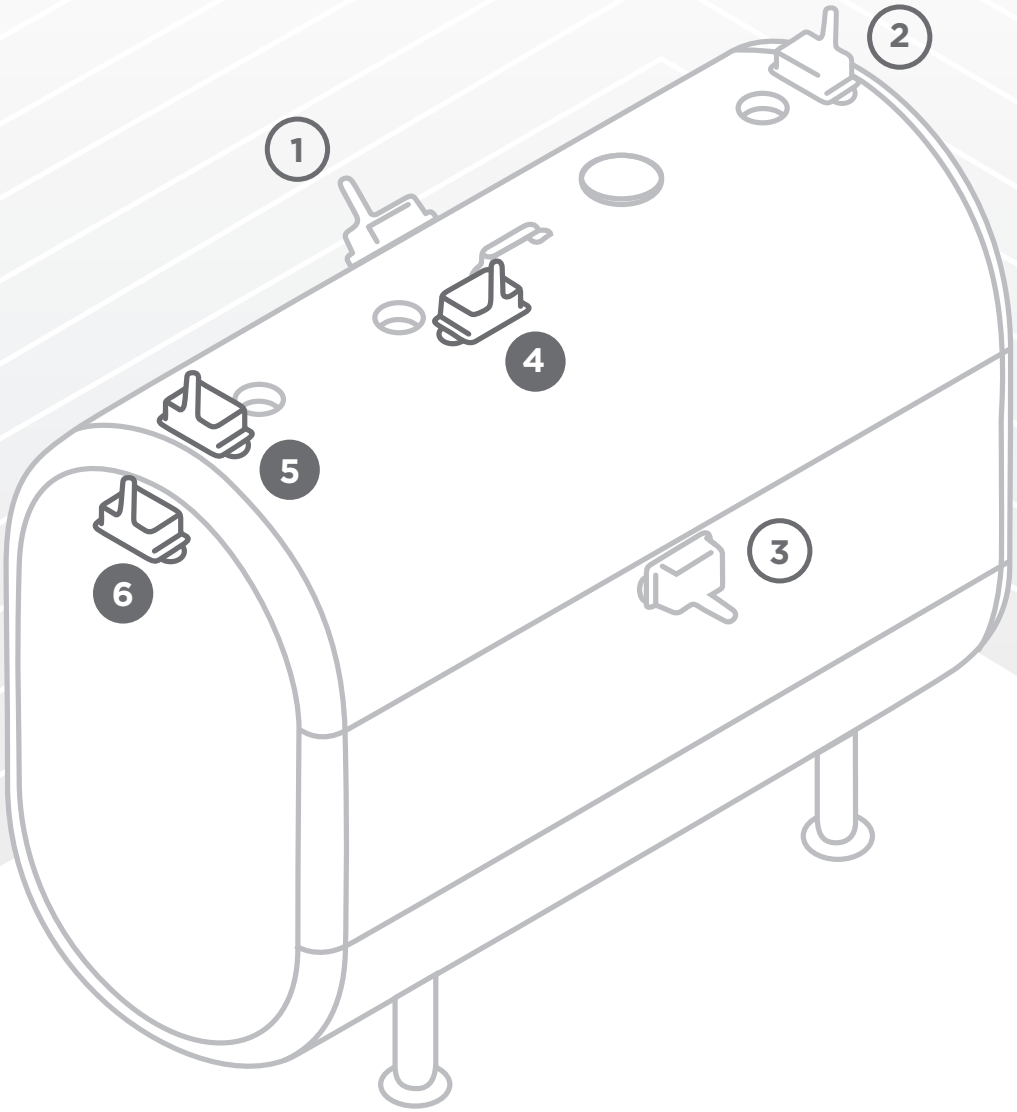


Start clean

Clean around the tank's port to avoid contamination of fuel;

Remove any rust or dirt on the plug or fitting threads.

Maximizing Monitor Performance



Not Optimal.

Installing a monitor in position 1, 2 or 3 can cause impediments to signal transmission which can result in inaccurate readings and premature drainage of a monitor's battery.

1 2 **Too close to wall.** Can cause signal interference.

3 **Monitor installed too horizontally.** Can cause signal interference.

Optimal Position.

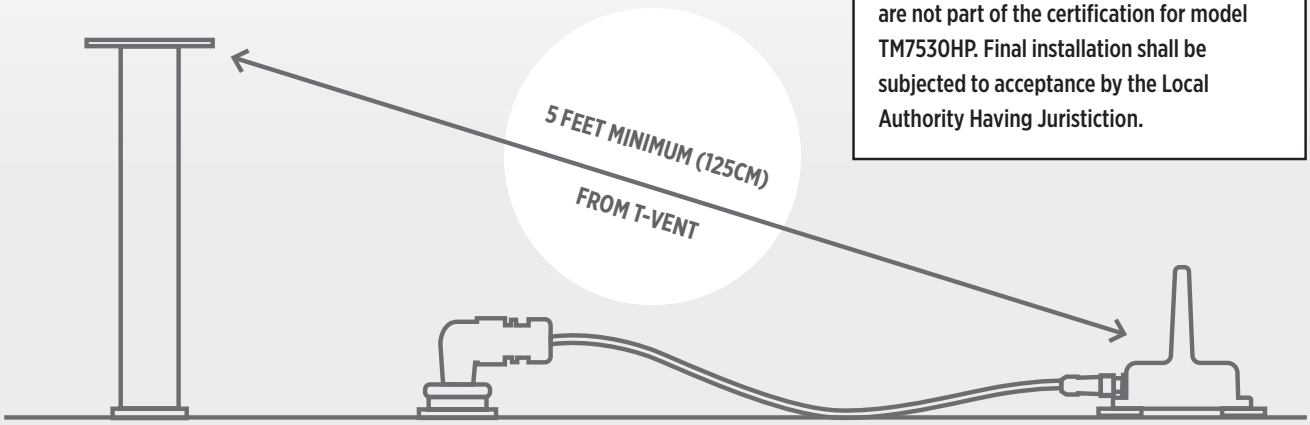
Installing a monitor is position 4, 5 or 6 will ensure maximum signal strength which will conserve battery life and provide accurate readings.

4 5 **Mounted vertically, top of tank, far from walls.** Maximizes signal strength.

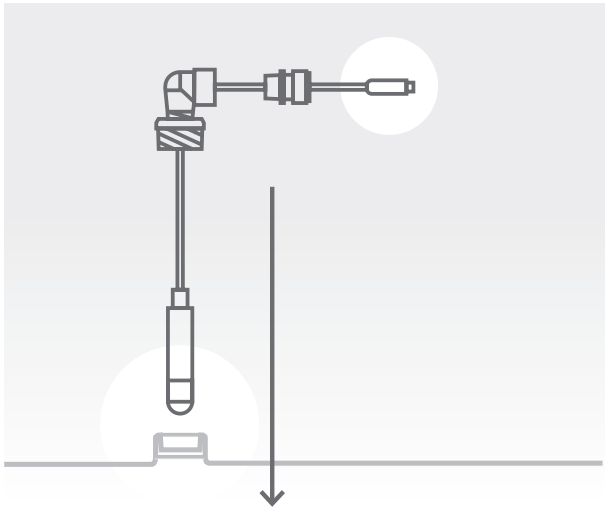
6 **Mounted vertically, side of tank, far from walls.** Maximizes signal strength. Suggested wall mount bracket: ACWMB1.

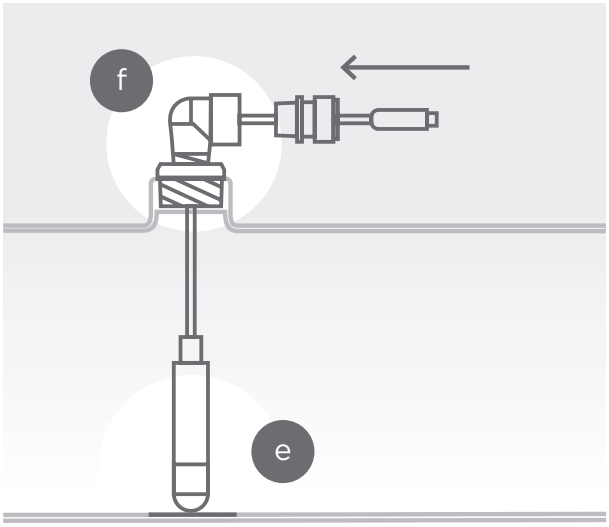
Safety

IMPORTANT ⓘ ALWAYS FOLLOW YOUR LOCAL REGULATIONS AND STANDARDS.
Consult with certified personnel to ensure your installation is compliant.
Mounting fittings, such as elbow fitting, are not part of the certification for model TM7530HP. Final installation shall be subjected to acceptance by the Local Authority Having Juristiction.



Installation Instructions





Step 1 **Unplug your monitor**

a. Unplug the cable from the communicator by carefully turning the connector's front holding nut counter-clockwise.

Insert the sensor into the tank

b. Loosen the cover nut and remove the cord grip from the elbow to allow the cable to move;

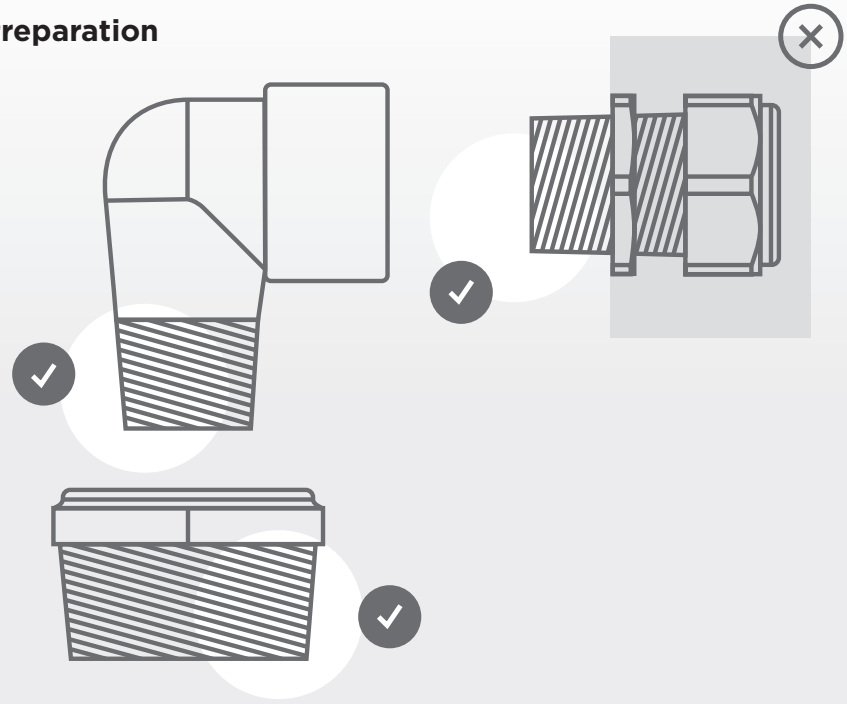
c. Then push the cable through the elbow until most of the cable is hanging with the sensor, ensuring the sensor will touch the bottom when inserted in the tank;

d. Gently pull/tug the cable to straighten it. Please DO NOT pull from the sensor or connector;

e. Slowly insert the sensor into the tank until it is skimming the bottom;

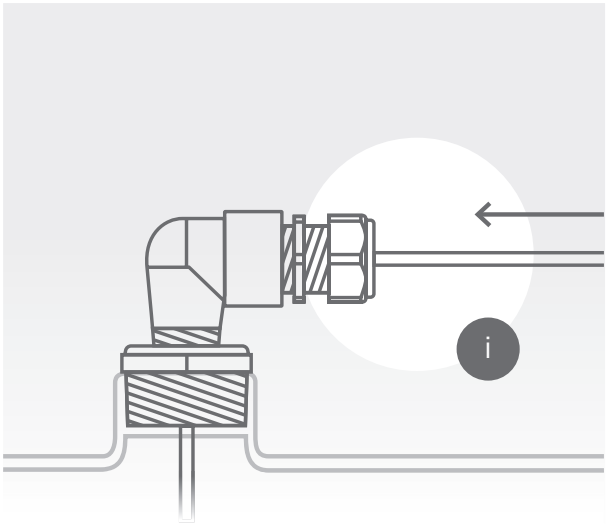
f. Slide reducer, elbow and cord grip through the cable until touching the bung hole.

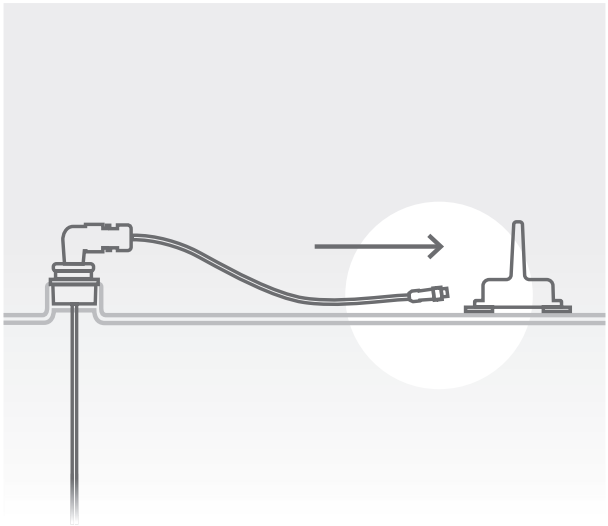
Preparation



<u>DO NOT</u> apply Teflon tape on the <u>front nut</u> of the cord grip.

<u>DO</u> apply Teflon tape on the NPT connections.





Step 2 Adjust your cable length

g. Thread fittings into bung hole of tank and tighten with a wrench. Note: Be careful not to over-tighten as the plastic fittings can get damaged;

h. On the final torque, ensure the cable is facing towards the communicator;

i. Carefully push the cable through the elbow to ensure you leave a little extra cable inside (3-4 inches for tanks <u>shorter</u> than 6 feet. 5-10 inches for tanks <u>taller</u> than 6 feet);

Note: <u>DO NOT</u> leave too much cable inside as it could skew level readings. Guidelines above must be followed closely.

Step 3 Secure lead in place

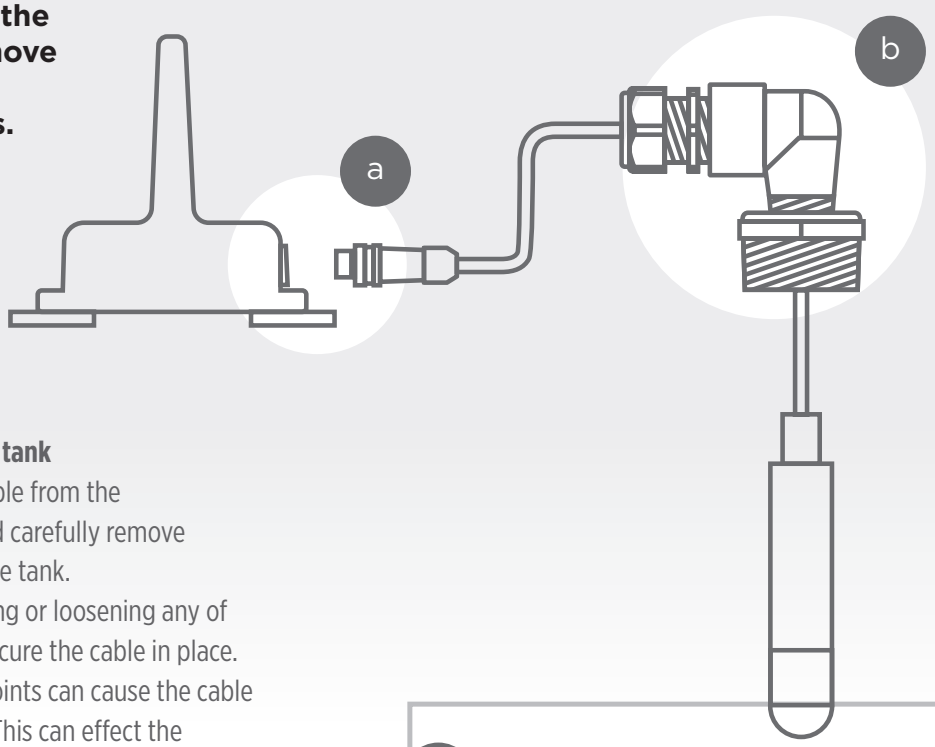
j. Tighten the cover nut at the elbow to fix cable in place.

Step 4 Connect

k. Connect cable to communicator.

Device Maintenance

When required, clean the sensor in order to remove any accumulated dirt, sludge, gunk or debris.



Step 1 **Remove sensor from tank**

a. Disconnect the cable from the communicator and carefully remove the sensor from the tank.

b. Avoid disconnecting or loosening any of the parts which secure the cable in place. Loosening these joints can cause the cable to shift in length. This can effect the accuracy of the reading.

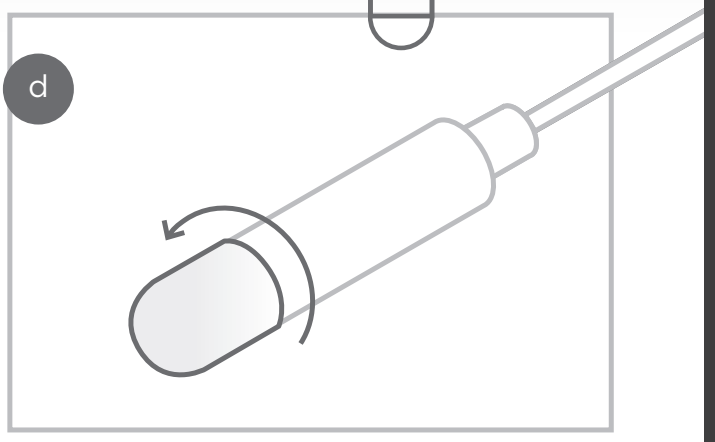
Step 2 **Disassemble sensor and clean**

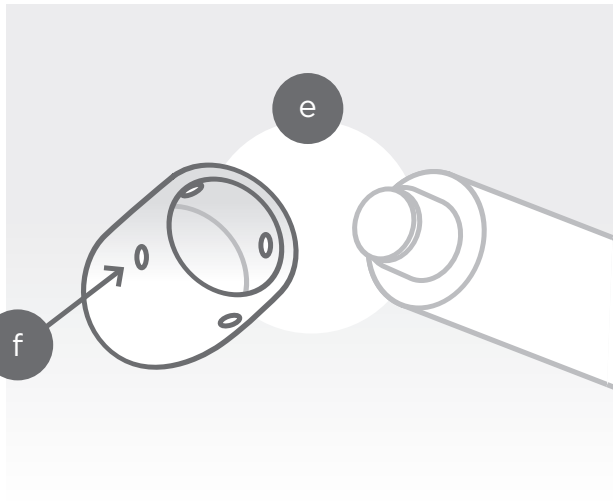
c. Once removed, rinse sensor thoroughly under running water.

d. When exterior of sensor is clean, twist the tip of the sensor counter-clockwise to unscrew.

e. Rinse the inside of the tip cover thoroughly ensuring all dirt, grease or debris has been washed away.

f. Ensure the small orifices on the tip cover are also thoroughly cleaned so fluid can filter through freely.





Step 3 **Reassemble and install sensor**

g. Towel or air dry sensor shaft and tip thoroughly and re-attach.
Inner tip is sensitive. Avoid touching.

h. Install sensor in tank.
If needed: add Teflon paste or tape to the bushing fitting. Remember to roll the cable to avoid damage while screwing in.

i. Reconnect cable to transmitter.

Members can watch step-by-step installation videos and shop online

Sign up free today

otodatatankmonitors.com/membership

Members can purchase monitors and accessories like gauges, leads, mounting equipment and more via our online store.

IMPORTANT

Please take a moment to carefully read the installation instructions included with your monitors, and ensure you understand and respect local regulations.

ABOVE-GROUND TANKS

Do not install monitors under lids.

UNDERGROUND TANKS

Plastic lid suggested. Metal lids will obstruct signal.

Reading installation instructions will ensure maximum monitoring performance on all your tanks and installations.