

1. Before You Begin

This guide provides basic information to assist you in getting started. Go to support.oleumtech.com to download the full User Guide for detailed installation and other information.



WARNING!

Ensure installation of the transmitter meets applicable state and national electrical code requirements. The installation of the transmitter should only be performed by a qualified installer or a factory representative.

Explosion Hazard – substitution of components may impair Intrinsic Safety.

Use only the SX1000-BP3 Battery Pack.

To prevent ignition of flammable or combustible atmospheres, disconnect power before servicing.

To prevent static discharge, wipe with damp cloth only.

Although the transmitter is very durable, do not install it on high vibration applications or where transmitter is subject to severe mechanical shock.

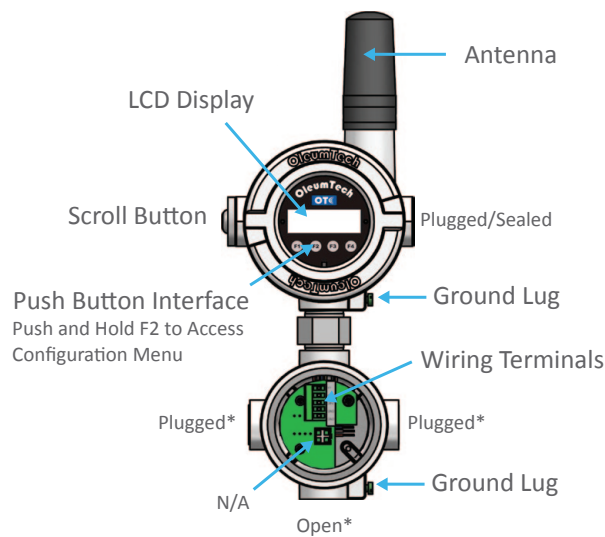
Disconnect the battery when the device is not in use.

2. Required Items

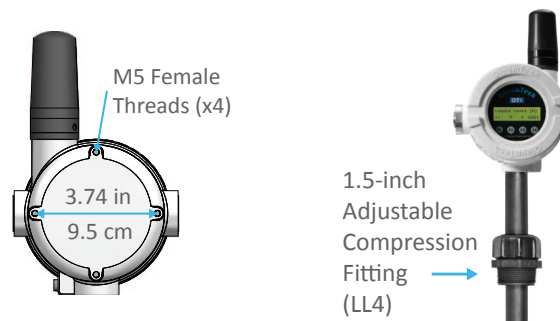
- WT Series Hydrostatic Level Transmitter
- SX1000-BP3 Transmitter Battery Pack (supplied with the transmitter)
- 1-5 Vdc Hydrostatic Level Sensor (supplied with WT-LL4)
- Compression fitting (supplied with WT-LL5)
- Mounting hardware (supplied with WT-LL5)
- All-in-One Configuration Cable (SX1000-CC2) optional
- OTC Wireless Gateway (fully set up)
- Technician's screwdriver (flathead)
- Screwdriver set
- Industrial-grade thread sealant or tape
- Adjustable wrench
- 10 mm hex wrench for 3/4" NPT bolt removal
- Any other tools or equipment for proper installation
- PC with:

Latest BreeZ® Configuration Software installed
Microsoft Windows® 7 or later
1 GHz or faster processor
1 GB or more RAM
500 MB Hard Disk Space or more
USB or Serial port

3. Hardware Overview



*3/4-inch NPT Female / 10 mm Hex



4. Wiring Diagram - WT-LL5

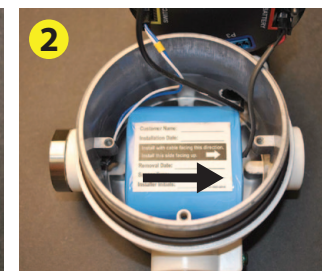
Remove Junction Box Cover and wire device based on Table below. Terminal Blocks are removable to facilitate wiring.

TERMINAL	DESCRIPTION
1	V+
2	AIN1 SIGNAL
3	DIN1
4	GND
5	GND

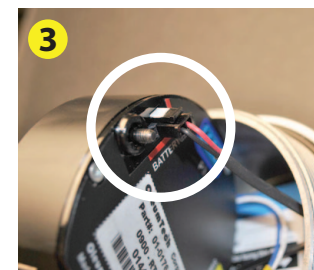
5. Battery Installation



Remove enclosure cover and detach LCD puck held down by 2 screws.



Insert battery pack with label side up and arrow pointing to the right.



Connect battery to battery terminal.



Connect the 4-pin configuration cable if programming device via PC.



Tighten enclosure cover by hand only.

WARNING

Puck MUST be fully seated and fastened securely BEFORE attaching back the enclosure cover.

Tighten cover(s) only by hand. DO NOT use any tools.

Replace Battery if:


- Nothing appears on the LCD screen after plugging in the battery.
- Battery level ≤ 2.9 Vdc.
- ONLY use Battery Pack SX1000-BP3.

6. Create a Project File in BreeZ®

1. Run the BreeZ Software on the PC.
2. Use the project creation wizard to build a project file.
 - a. Configure the RF network settings.
 - b. Add and configure a primary wireless gateway.
 - c. Add and configure a Liquid Level (Hyd) Transmitter - WT Series.
 - d. Open Edit Templates window to add register tags to the Modbus table.

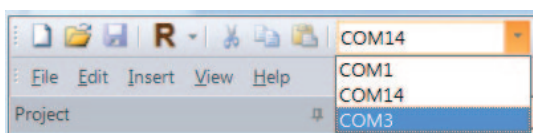
REGISTER TAG	DESCRIPTION
Product Level	Last read of the product level
Tank Full %	Last calculated full percentage based on tank height
Product Volume	Last calculated volume based on the tank diameter and product level
Error	0 = No issue; 501 = Product calibration error
DIN1	Last known state
DIN1 Count	Counts the number of times the state changes
Battery Voltage	≥ 2.9 V is good, otherwise replace
RF Timeout	0 = OK; 1 = RF Failure
RSSI Value	Excellent RF = 40-75; Good = 76-90; Weak 91-115; None = 0
RF Refresh	0 to 65,535
Firmware Version	Indicates firmware version of the device

7. Setup the Wireless Gateway

1. Refer to the instructions provided on the QSG or User Guide of the specific wireless gateway.
2. Supply power to the gateway.
3. Connect the PC to the gateway.
4. Click on the gateway in the BreeZ project tree.
5. Click  the update device button on the toolbar.


8. Setup the COM Port

1. Connect the Battery Pack to the transmitter.
2. Connect the PC to the transmitter.
3. Select the correct COM port in the software.



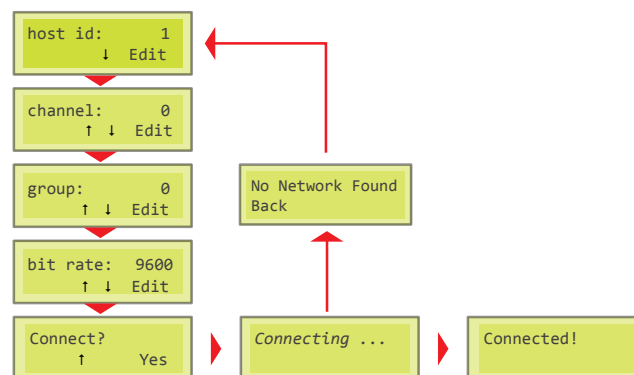
You may need to check the “Device Manager” on the PC to identify the correct COM Port.

9. Program the Transmitter with the PC

1. Connect the Battery Pack to the transmitter.
2. Connect the PC to the transmitter.
3. Click on the transmitter in the project tree.
4. Click  the update device button in the BreeZ toolbar.

10. Connect to the RF Network Using the LCD

1. Obtain the device’s RF network information from BreeZ.
To get the **host id**, double-click on the device in the project tree.
To get the **channel**, **group**, and **bit rate**, double-click on site in the project tree.
2. Press any button to activate the LCD screen.
3. Enter the device’s RF network information to connect to the gateway.

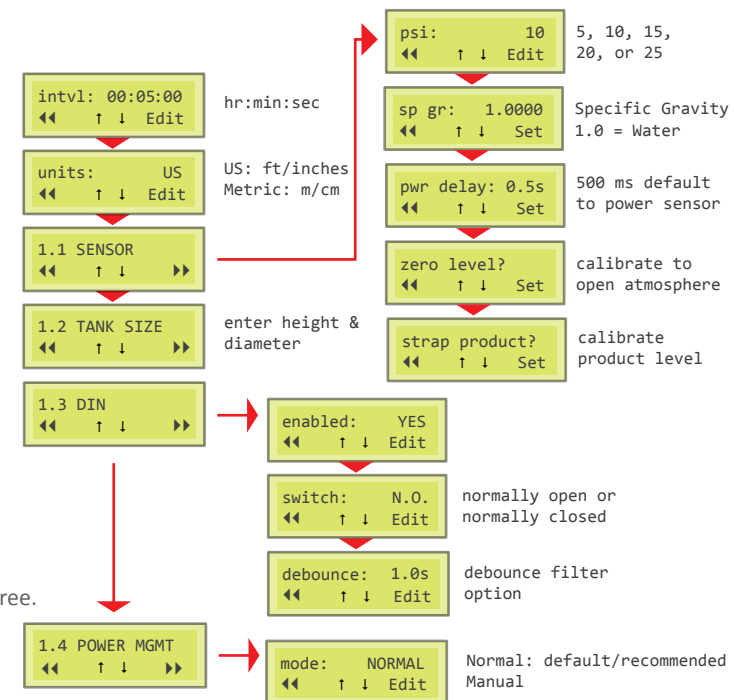


11. Setup the Transmitter Using the LCD

1. Press and hold the F2 key until CONFIG appears on the screen.



2. Use the function keys to navigate and edit settings.



12. Installation Best Practices

1. Follow your organization’s best grounding practices.
2. Always install the transmitter in the upright position so that the antenna pole is correctly oriented.
3. When possible, have at least 10 ft of ground clearance for optimal RF performance.
4. Have at least 10 ft of vertical separation with other antennas.
5. Be sure to tightly seal all orifices using industrial-grade thread sealant or tape.
6. Tighten enclosure cover and quick connect fitting by hand only.
7. Face the LCD away from the sun when possible for better visibility.