Innovations in Water Monitoring

Instruction Sheet

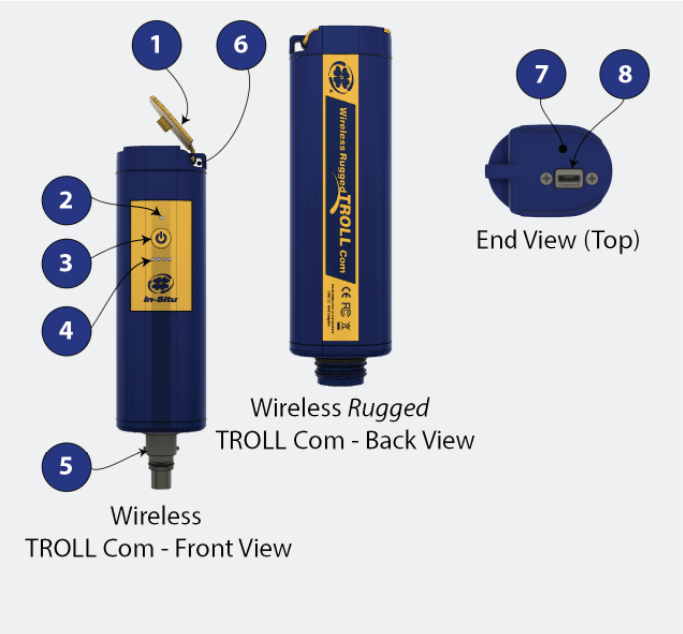
Wireless TROLL & Wireless Rugged TROLL Communication Devices

Part Numbers: 0031240 (Wireless TROLL Com); 0031220 (Wireless Rugged TROLL Com)

Description

The *Wireless TROLL Com* enables wireless communication between a Bluetooth 2.0-enabled Android or Windows device and an instrument deployed on a cable. You can also use the Wireless TROLL Com as a replacement for a standard wired TROLL Communication Device.

The *Wireless Rugged TROLL Com* permits wireless transmission between a Bluetooth 2.0-enabled device and a Rugged TROLL data logger. You must use a Direct Read Rugged TROLL cable with the Wireless Rugged TROLL Com.



1	Dust cover for the USB connection
2	Connection status **Red (flashing)** = The communication device, instrument, and Bluetooth-enabled device are not connected. **Red (continuous)** = The communication device and instrument are connected, but the communication device is not connected to the Bluetooth-enabled device. -OR- The communication device is connected via USB cable. **Green (flashing)** = The communication device is connected to the Bluetooth-enabled device, but is not connected to the instrument. **Green (continuous)** = The communication device, instrument, and Bluetooth-enabled device are connected.
3	On/Off button

4	Battery charge status: ●●●● 100% -90% ●●●○ 90% - 75% ●●○○ 75% - 50% ●○○○ 50% - 25% ●○○○ Less than 25%
5	Cable connector to the instrument
6	Lanyard connector
7	Serial number
8	USB connection to a power source for charging the internal battery or wired connection to a computer

Contents

- Wireless TROLL Com
- USB cable
- AC wall charger (U.S.A. only, universal charger sold separately)
- Lanyard

Charging the Communication Device

1. Remove the protective cover from the USB slot.
2. Connect the USB cable to the device.
3. Plug the USB cable into the wall charger or a powered USB port such as a computer that has a charger plugged in.
4. The device lights will turn on and blink according to charge level.

A fully-charged communication device will run for approximately 40 continuous hours.

Battery Tips

The communication device uses an internal, rechargeable Lithium-ion (Li-ion) battery to supply power. While these batteries last for years with minimal decrease in performance, there are a few tips to prolong the life of the battery.

- Avoid full discharges and charge the battery more often between uses.
- Avoid storing the communication device in a high temperature (above 86° F / 30° C) area.

Connecting to a Wireless TROLL Com

A Wireless TROLL Com can be used to connect the instrument to software if the sonde is deployed on a cable.

1. Turn on the Wireless TROLL Com.
2. Make sure the cable is connected to the instrument as well as the communication device.
3. Go to Bluetooth settings on your mobile device or computer.
4. From the Bluetooth section, search for devices.
5. Tap or click the serial number of the communication device to pair the device with the phone or computer. The serial number is located under the USB flap.

Connecting to VuSitu

1. Open the VuSitu Mobile App. If you have correctly paired your Wireless TROLL Com with your wireless device, and the instrument is available, the software will connect and display readings.

> ✔ If the Searching screen continues to show, tap "Choose another device" and select the device you are trying to connect to.

Connecting to Win-Situ 5

1. Open Win-Situ 5 Software.
2. When prompted, "Connect to device now?" click **No**.
3. Plug the USB charging cable into the computer and Wireless TROLL Com.
4. Click **Preferences**, then click **Comm Settings**.

5. Select the correct Com port used by the charging cable, then select the communication settings for the instrument you are connecting. The following default communication settings are most common for In-Situ instruments:
    - Baud: 19200
    - Data Bits: 8
    - Parity Bits: Even
    - Stop Bits: 1
    - Device Address: 1
    - Mode: Modbus-RTU

    If you cannot connect using these settings, click the "Search for Devices" or "Reset All Devices" button.
6. Click the checkmark, then click the Connect button in the lower right hand corner.

Specifications

Operating temperature	-5 to 50° C (23 to 122° F); 95% relative humidity, non-condensing
Storage temperature	-20 to 50° C (-4 to 122° F); 95% relative humidity, non-condensing
Dimensions	16 x 4.3 x 3 cm (6.3 x 1.7 x 1.2 in.)
Weight	165 g (0.36 lb)
Materials	PC / ABS blend, Silicon, Urethane, Stainless steel, Brass, Santoprene, Poron®, Polyethylene, Versapor®, Titanium, PEEK, Viton®
Environmental rating	IP67
Output options	***Bluetooth***®, USB
Communication protocol	Android®: SPP Windows®: SPP or USB
Battery type	3.7 V 8600 MWh Lithium rechargeable cell (UBBL19-FL)
Charging requirements	5 VDC USB charger (1 A or 500 mA)
Warranty	1 year
Certifications	CE, FCC (SSSBC127-X), WEEE

Sensor	Temperature	Barometric Pressure
Accuracy	±2° C max	±3 mbar max
Range	-20 to 70° C (-4 to 158° F)	300 to 1100 mbar
Resolution	0.1° C	0.01 mbar
Sensor type	Fixed	Fixed
Response time	< 30 seconds	Instantaneous in thermal equilibrium
Units of measure	Celsius or Fahrenheit	psi, kPa, bar, mbar, mmHg, inHg, Torr, atm
Method	EPA 170.1	Piezoresistive