HERON INSTRUMENTS INC.

For Good Measure

Conductivity +

Tape options: 100ft/30m to 5000ft/1500m | Warranty: 2 years, probe 1 year

The **conductivity +** enables accurate measurements of **conductivity**, **water levels** and **temperatures** in wells, boreholes, stand pipes and estuaries where salt water intrusion and contamination levels become a concern. **Conductivity** can be an early indicator of change in a water system due to fluctuations of salinity in water levels.

The high tensile steel core measuring tape is stretch resistance and certified to **ASME standards** and is ideal for profiling up to **70˚C(160˚F)**. An LCD screen displays conductivity values up to **250,000 µS** and can support changing temperature units to Celsius, Fahrenheit, and scientific units. Auto calibration: the unit will automatically detect your calibration solution saving time when calibrating. Calibration of the **conductivity+** is easy using up to four readily available solutions (1413µS/cm, 5000µS/cm, 12880µS/cm, 111800µS/cm).

Features included with the conductivity +:

- **Electronic Module (IP65)** – **High Contrast** LCD screen displays conductivity values up to **250,000 µS** and a temperature range from **-20˚ C to 70˚ C (-5˚ F to 160˚ F)**, removable for easy cleaning and servicing
- **Auto off** - activates after five minutes of 0 conductivity profiling
- **Operating temperature** – **-20℃ to 70℃ (-5℉ to 160˚ F)**
- **Probe (IP68)** – fully pressure/depth rated, 16mm (5/8"),**field replaceable**
- **4 electrode sensor design**
  - Higher range of up to 250,000 µS/cm
  - Higher accuracy
- Support for changing temperature units to Celsius, Fahrenheit, and scientific units. °C, °F, °K, °R
- **Steel Tape** – high tensile steel, jacketed with **Polyethylene**, high break strength, stretch resistant and lifelong legibility – markings in metric (mm) or engineering scale (1/100')
- **Padded Carry Case** – FREE backpack included w/ adjustable straps, laptop holder & notepad pouches to protect your precision meter from the elements
- **Tape Guide and Hanger** – to support the meter at the well head and to **protect** the tape from sharp edges on the well casing
- **PFAS FREE** - Manufactured with wetted material not known to contain PFAS

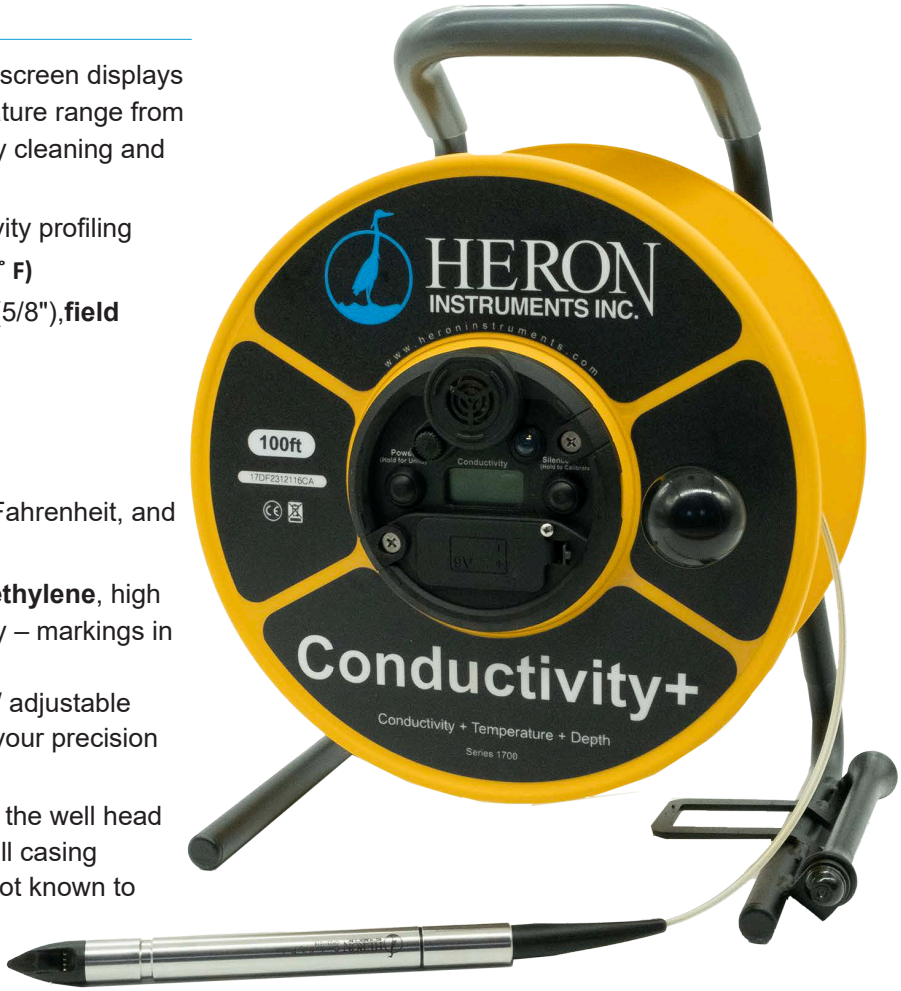

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Figure 1

Conductivity Electronic Panel

Item	Part Numbers
Conductivity Probe	1702-2
Conductivity Electronic Panel	1721-2

To maximize battery life, the **Conductivity+** meter automatically shuts off after 5 minutes of inactivity. When the battery is low, "CHANGE BATTERY" appears on the display panel. The meter will continue to operate, but the battery should be changed as soon as possible.

Note:
For best results, calibrate the **Conductivity+** meter before each measurement session.

Figure 2
Unique hanger and tape protector supports the meter on the casing and protects the tape from sharp edges on the well casing.

HERON ALSO MANUFACTURES:

- Water Level Meters
- Data Loggers
- Interface Meters
- Temperature Meters
- Well Casing Indicators
- Well Depth Indicators
- Tag Line
- Downhole Inspection Cameras

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Please visit our website **www.heroninstruments.com** for more information on the complete Heron line.

Made in Canada

HERON INSTRUMENTS INC.
For Good Measure

Conductivity+

With Temperature & Depth

Operating and Maintenance Instructions

Conductivity+ Instructions

General Care of the Conductivity+

- Do not scrape the tape against sharp-edged well casing. (Figure 2)
- Avoid entanglement with other equipment in boreholes and wells.
- Rewind the tape onto the reel after each use.
- Clean the probe tip with distilled water.
- Do not tap or hit the probe to dislodge dirt or mud. Soak the probe tip in water to remove trapped dirt.

Warranty is conditional upon adherence to these guidelines

Equipment Check

Clean the probe and check for damage

Thoroughly clean the probe with distilled water to minimize any buildup that could interfere with results.

Test the Unit

1. Press and release the power button. Automatic System check will be performed. The digital display will then update with conductivity and temperature readings.
2. Automatic System Check will be performed.
   - OPEN message: There is a disconnect - either, wire, probe, tape.
   - SHORT message: There is a cut in the tape.
3. If the unit does not turn ON, replace the 9V battery in the battery box (Figure 1).
4. Place the probe in tap water. The unit will emit an audio and visual indication and the display will update with temperature

   indication and the display will update with temperature and conducivity readings.
5. Remove the probe from water. The unit will stop sounding.

Use in the Field

1. Press the power button to turn the unit on. The display will show you the battery life on startup. The buzzer will also beep between 1 and 5 times.
   - 5 times indicates battery life of over 80%
   - 4 times indicates battery life between 60-80%
   - 3 times indicates battery life between 40-60%
   - 2 times indicates battery life between 20-40%
   - 1 time indicates battery life is less than 20%
2. Holding down the power button will change your temperature units. It will cycle through 4 options (˚ C,˚ F, or scientific˚ K,˚ R). The conductivity units will always be µS/cm.
3. The silence button will mute the buzzer entirely. The LED indicator will still function. Pushing the Silence button again will re-activate the buzzer.
4. Rotate the volume dial to turn the buzzer volume up and down.

Calibration of the Conductivity+

For best results calibrate the Conductivity+ meter in all 4 solution at 25˚C before starting a measurement session.

- Place the probe in the calibration solution.
- To enter calibration mode, hold down the Silence button until the "Cal. Sensor" message is displayed.
- The probe will automatically detect the calibration solution it is in. It can recognize the following solutitons: 1413, 5000, 12880, 111800.
- Once the display indicates what calibration solution the probe is in, press and release the Silence button to confirm.
- If the Silence button is not pressed within 3 seconds it will cycle through the remaining calibration solutions then exit.
- The unit can be calibrated in all 4 solutions, the unit will then function with multi-calibration points.
- Note: You do not need to use all 4 calibration solutions, the unit will work utilizing the calibration points that have been provided.
- Follow best practices for calibration:
  - Clean the probe with distilled water and dry before each solution is used.
  - The temperature needs to equalize before entering calibration mode.
  - Calibrate starting with the lowest solution and work up to the highest.

Troubleshooting the Conductivity+

Question: The unit does not calibrate properly

- Gently move the probe to displace air bubbles and perform calibration.
- Ensure that the temperature readings are stable before performing calibration.
- Clean the probe tip in distilled water, dry the probe and perform calibration.

Question: The unit does not stop sounding out of water

- Use the included brush to clean the sensor.

Contact Heron Instruments or your supplier if you cannot isolate the problem.

Warranty (2 years, probe 1 year)*

Heron Instruments Inc. warrants to repair or replace any such defective equipment or part (determined to our satisfaction to be a defect in workmanship or original material) upon receipt and inspection of such defective equipment to Heron Instruments Inc. with all shipping pre-paid by the user.

In no event shall Heron be liable for any direct, indirect or consequential damages, abuse, acts of third parties (rental equipment), environmental conditions or other expenses which may arise in connection with such defective equipment.

This warranty shall not apply to damage of equipment caused by improper installation, usage, storage, alteration or inadequate care.

Heron Warranty coverage does not extend to the following:

- Tape, bag or batteries used with the product
- Products used as rental equipment
- Products contaminated by materials which are known to be hazardous and; as such, have rendered the unit unserviceable
- Parts failure due to neglect in cleaning or incorrect servicing
- Failure of parts caused by misuse

* unless otherwise specified under local law

For service information:

- visit **www.heroninstruments.com**
- email **service@heroninstruments.com**
- call **1-800-331-2032** or **905-628-4999**

Warranty is conditional upon adherence to these guidelines.