TLC Meter

Temperature, Level, Conductivity

Model 107

The TLC Meter is ideal for profiling conductivity and temperature in wells and open water. It displays accurate measurements of conductivity and temperature on a convenient LCD display that rotates for ease of reading.

Conductivity measurements are read from 0-80,000 µS/cm with readings giving accuracy of 5% of reading or 100 µS (which ever is greater).

Water level and probe depth measurements are read off the Solinst durable PVDF flat tape, which is accurately laser marked every 1/100 ft or each millimeter. Tape lengths are now available up to 1000 ft (300 m).

For automated water level, temperature, and conductivity datalogging, Solinst also offers the LTC Levelogger Junior. (See Model 3001 LTC Levelogger Junior Data Sheet).

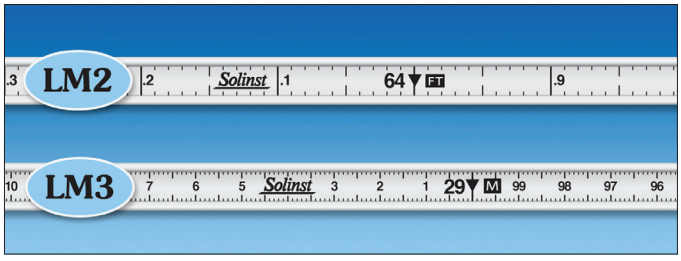
Conductivity Made Easy

- Tape lengths to 1000 ft (300 m)
- Rugged Solinst reel and accurate PVDF laser marked tape
- Probe diameter 3/4" (19 mm)
- Display that rotates for easy reading
- Standard 9V alkaline battery gives 90 hrs. of use
- Auto-Off after 8 minutes

Rugged PVDF Flat Tape

The high quality PVDF flat tape reels smoothly, remains flexible and hangs straight in the well, irrespective of temperature. The flat tape is mounted on a sturdy, well-balanced Solinst reel, with a convenient battery drawer for the 9 Volt alkaline battery. Permanent laser markings each 1/100 ft or millimeter allow accurate readings.

Stranded stainless steel conductors and copper coated stainless steel conductors resist corrosion, provide strength and are non-stretch. They make the tape easy to repair and splice. The dog-bone design reduces adherence to wet surfaces.



LM2: Each 1/100 ft, 1/10 ft and ft
LM3: Each mm, cm and m

Lengths: 100 ft, 200 ft, 300 ft, 500 ft, 750 ft, 1000 ft
(30 m, 60 m, 100 m, 150 m, 250 m, 300 m)

Water Conductivity Measurements

The TLC Meter uses a 'smart' conductivity sensor with platinum electrodes to measure conductivity. The conductivity is displayed on the rotating screen along with the associated temperature measurement. The 'smart probe' displays conductivity that has been standardized to 25°C, i.e. Specific Conductance (displayed as EC). The conductance temperature coefficient is 2.0% per °C.

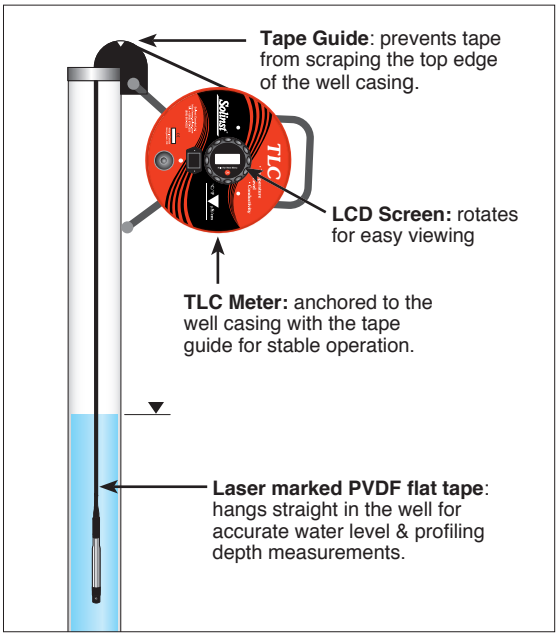
Calibration is simple, using 1413 µS, 5000 µS, 12,880 µS, and/or 80,000 µS solutions for 1, 2, 3, or 4 point manual conductivity calibrations.

Applications

- Profiling conductivity and temperature in wells and open water
- Salinity studies
- Saltwater intrusion investigations
- Testing for water quality impairments from road salt
- Tracer tests
- General indication of chemical contamination level
- Early warning of changes in water quality at:
  - Landfills
  - Industrial sites

Water Level & Depth Measurements

When the zero point of the probe enters water, an electric circuit is completed, briefly activating a buzzer and blanking out the screen for about 1 second. The depth to water is then read off the tape. When the TLC Meter is withdrawn from the water, a short buzz gives a warning that the probe is now out of water.



A Tape Guide/Datum allows the depth measurement to be read at the marked position on the Tape Guide, to give reliable, repeatable, accurate depth measurements when profiling a well. The Tape Guide protects the tape from damage on rough edges of well casing.

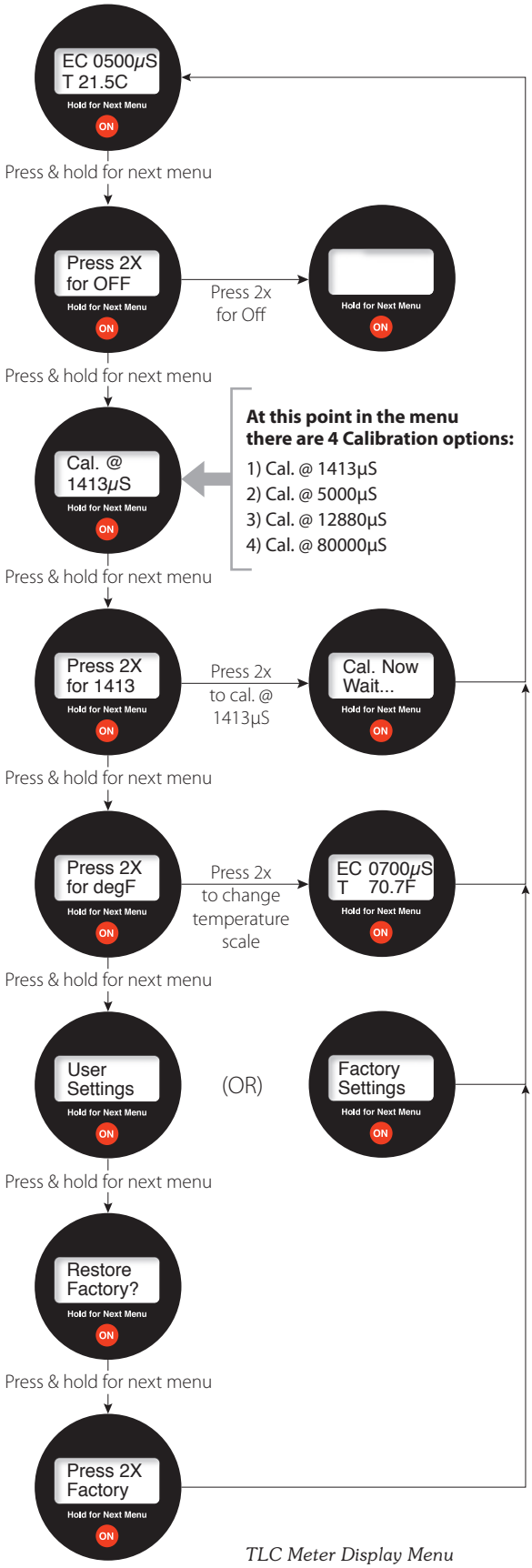
Water Temperature Measurements

The TLC Meter operates in a range from -15°C to +50°C (23°F to 122°F). You may choose to have the readings displayed on the LCD screen in °C or °F. The 'smart' TLC probe automatically adjusts the measured conductivity values to display as specific conductance standardized to 25°C. This provides standardized, repeatably comparable measurements.

When the probe is turned on, the LCD screen displays both conductivity and temperature.

Conductivity & Temperature Display Menu

The display menu is simple to operate. When the unit is turned on, it will begin to display electrical conductivity and temperature readings, in or out of water. If the ON button is held down for 2 seconds and released, the display moves to the next menu item. Press the ON button two times quickly in any given screen to achieve the displayed action.



TLC Meter Display Menu

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