

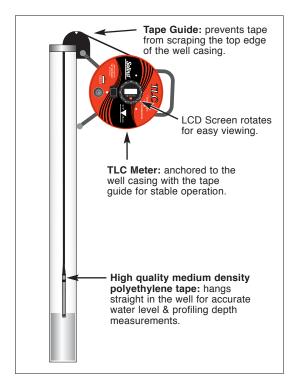
Model 107 Data Sheet

### Level and Depth Measurements

When the zero point of the probe enters water, an electric circuit is completed, briefly activating a buzzer and blacking 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 When the TLC Meter is withdrawn from the water, a short buzz gives a warning that the probe is now out of water.

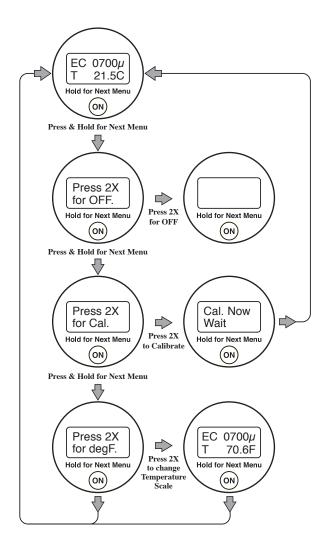
A Tape Guide/Datum is provided with the meter for use when profiling a well. The Tape Guide protects the tape from damage on rough edges of well casing and allows the depth measurement to be read at the marked position on the Tape Guide, to give reliable, repeatable accuracy.

When the probe is turned on, the LCD screen displays both conductivity and temperature. A short wait of 10 seconds per degree C of temperature change is required for the measurements to stabilize at each desired depth before recording the three measurements.



# Temperature

The TLC Meter operates in a range from  $-15^{\circ}$ C to  $+50^{\circ}$ C. You may choose to have the readings displayed on the LCD screen in °C or °F. Accuracy is +/- 0.3°C in Celsius, or +/-0.5°F in Fahrenheit. Conductivity measurements are temperature sensitive. The 'smart' TLC probe automatically adjusts the measured conductivity values to display as specific conductance. This provides standardized repeatably comparable measurements.



# **Display Menu**

The display menu is simple to operate. When the unit is turned on it will begin to display electric 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 and so on, through 4 windows.

The next window allows the user to turn the TLC Meter off, however, the meter also automatically turns off after 8 minutes to extend battery life. The following window brings up the calibration option, which leads into a straight forward sub-menu. The fourth window allows the user to choose Fahrenheit or Centigrade for the temperature display.

The menu then cycles on round to display the current readings. Pressing the ON button 2 times in any given screen will achieve the displayed action.

Printed in Canada 11/2005

For further information contact: Solinst Canada Ltd. Fax: (905) 873-1992; (800) 516-9081 Tel: (905) 873-2255; (800) 661-2023 35 Todd Road, Georgetown, Ontario, Canada L7G 4R8 Web Site: www.solinst.com E-mail: instruments@solinst.com







Model 107 Data Sheet

#### Model 107

# **TLC Meter** Temperature, Level, Conductivity

The Solinst TLC Meter displays accurate measurements of conductivity and temperature on an LCD display that rotates for reading convenience. Water level and probe depth measurements are read off the accurate Solinst flat-tape marked each 1/100 ft. or millimeter. The tape is housed on a standard Solinst reel. These features make the TLC Meter ideal for profiling conductivity and temperature in wells and open water.

### **Conductivity Made Easy**

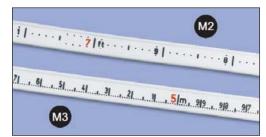
- Accuracy 2% of reading
- Convenient Solinst reel and accurate tape
- Lengths to 300 ft. or 100 meters
- Display that rotates for easy reading
- Standard 9V alkaline battery gives 90 hrs.
- Auto-Off after 8 minutes
- Inexpensive

### Solinst Flat Tape

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

Stranded stainless steel conductors resist corrosion, provide strength and are non-stretch. They make the tape very easy to repair and splice. The dog-bone design reduces adherence to wet surfaces. Markings are permanently impregnated onto one side of the tape in your choice of scale:

**M2:** Each 1/100 ft. in black; feet in red **M3:** Each millimeter in black; meters in red



Lengths: 100 ft., 150 ft., 300 ft., 30 m., 50 m., 100 m.



### **Conductivity Measurements**

The TLC Meter uses a 'smart' conductivity sensor with platinum electrodes to read conductivity from  $0-80,000\mu$ S. The conductivity is displayed on the rotating screen along with the associated temperature measurement. The 'smart' conductivity probe displays conductivity which has been standardized to 25°C, i.e. specific conductance. Conductivity accuracy is 2% of reading from 100 - 80,000 $\mu$ S.

Calibration is simple. You may use single point or double point calibration. For further convenience, the TLC Meter uses automatic calibration solution detection.

### Applications

- Profiling conductivity and temperature in wells and open water
- Salt-water intrusion investigations
- Water quality impairments from road salt
- Tracer tests
- General indication of chemical contamination level
- •



