What factors should be considered when recommending a TLC Meter or WLT Meter?

1 Conductivity Readings

The most significant difference between these units is that the 107 TLC Meter measures the conductivity of water, in addition to level and temperature. The 201 WLT Meter measures temperature and level only. Therefore, the TLC Meter is more expensive (a carry bag is included).

The TLC Meter measures conductivity from 0–80,000 µS/cm with an accuracy of 5% or 100 µS/cm (whichever is greater).

Model 107
TLC Meter

2 Temperature Readings

If measuring the temperature of water is the priority in a project, and conductivity is not a requirement, the best option is the 201 WLT Meter.
The WLT Meter has the following advantages:

- Larger temperature range: -20ºC to 125ºC
- Twice as accurate from -5ºC to +50ºC
- Temperature reading resolution is higher
- Temperature stabilization is twice as fast

Model 201
WLT Meter

3 Level Measurement – Depth to Water & Total Depth

Depth to Water

The water conductivity detection threshold for the 201 WLT Meter is 30 uS/cm versus 100 uS/cm for the 107 TLC Meter. Therefore, if the water has low conductivity and your client needs to record depth to water, the 201 WLT Meter is the better option.

Total Depth

For total depth measurements, both Meters offer pressure-sealed probes for 300 m (1000 ft) submersion, with similar weight. Both Meters offer standard PVDF tape lengths up to 300 m (1000 ft); however, the 201 WLT Meter is available in additional lengths up to 600 m (2000 ft).

Note: both Meters use the same PVDF flate tape and tape seal plug for the probe connection; therefore, replacement tapes are interchangeable between the Meters.

201 WLT Meter Probe

107 TLC Meter Probe

The 201 WLT Meter and 107 TLC Meter look very similar and have many characteristics in common:

- Laser marked PVDF flat tape (marked every 100 ft or mm)
- 9V battery life estimate
- Auto-off feature
- Probe pressure rating
- Approximate weight and size of probe
- Similar wetted materials
- Operating temperature of the reel
- Durable, ergonomic reel with LCD screen

Specifications	107 TLC Meter	201 WLT Meter
Measured parameters:	Level, temperature and conductivity	Level and temperature
Conductivity detection threshold:	100 µS/cm	30 µS/cm
Temperature reading range:	-15°C to +50°C (23°F to 122°F)	-20°C to +125°C
Temperature reading accuracy:	±0.2°C (±0.4°F)	±0.1°C from -5°C to +50°C; ±0.5°C outside that range
Temperature reading resolution:	±0.1°C	±0.01°C
Temperature stabilization time:	30 seconds per °C	15 seconds per °C
Conductivity reading range:	0 to 80,000 µS/cm (standardized to 25°C)	n/a
Conductivity reading accuracy:	5% of reading or 100 µS (whichever is greater)	n/a
Probe pressure rating:	Submersible to 1000 ft (300 m)	Submersible to 1000 ft (300 m)
Probe weight:	3.5 ounces (100 grams)	3.07 ounces (87 grams)
Probe size:	3/4" diameter, 4.9" long (19 mm x 124 mm)	5/8" diameter, 5.08" long (16 mm x 129 mm)
Wetted materials (tape/probe):	PVDF, Santoprene, Delrin, Viton, 316 stainless steel, platinum	PVDF, Santoprene, Delrin, Viton, 316 stainless steel
Operating temperature of reel:	-15°C to +50°C	-20°C to +60°C
Battery life:	90 hours	90 hours
Auto-off:	8 minutes	8 minutes
Standard tape lengths:	Meters: 30, 60, 100, 150, 250, 300 Feet: 100, 200, 300, 500, 750, 1000	Meters: 30, 60, 100, 150, 250, 300 Feet: 100, 200, 300, 500, 750, 1000 (optional lengths up to 600 m (2000 ft))

In summary, if your client needs conductivity readings, then the Model 107 TLC Meter should be considered. If the study requires higher accuracy temperature measurement, or is a geothermal groundwater application, then the unit to recommend for preferred specifications and lower cost is the Model 201 WLT Meter.

Note: if your client requires continuous water level, temperature and conductivity measurements, our Model 3001 Levelogger Series of dataloggers should be considered.

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