

TankScan® TSM1000

Troubleshooting Guide



The power of data. **Optimized.**

SYMPTOM	POSSIBLE CAUSE	RECOMMENDED ACTION
Not Reporting or Aged Report	Depleted Battery (70% likely cause)	<p>Check if battery voltage is less than 6.0 V, yes, then replace battery. Replacement battery can be ordered by contacting TankScan Technical Support.</p> <p>Additional Info: A historical trend of the battery voltage can be displayed in AIP to get a better understanding of the rate of failure. A battery is capable of producing approx 2000 readings before needing replacement. At a 6 hour update rate a TankScan monitor should read for 24 months. Low ambient temperatures reduce the voltage of a battery. In northern climates it is best practice to replace aging batteries in the fall prior to the declining temperatures of the winter season.</p>
	Poor Cellular Connection (25% likely cause)	<p>If battery is greater then 6.0 V, then cellular connectivity is suspect. Communication strength can be checked using a historical trend of "connection attempts". Normal cellular strength is shown by a steady line of 1 connection attempts. Connection attempts greater than 1 indicate intermittent lack of cellular coverage. A remote antenna accessory is available to improve communication.</p> <p>An additional, but less consistent indicator of cellular strength is to view a trend of "Signal Strength". Signal strength indication of less than -90dB is considered weak.</p> <p>Consultation and ordering of a remote antenna is available by contacting TankScan Technical Support.</p>
	Communication Lock-Up (2% likely cause)	<p>If above inspections do not yield a reasonable cause a communication lock up either at the device or cell tower may be the cause. The remedy for either case is the same and is to reboot the monitor by swiping the board on the inside of the unit that is facing closest to the battery with a magnet which activates an internal switch to reboot the monitor and re-establish communications.</p>
	Electronics Failure (2% likely cause)	<p>As a last option if all above inspections do not yield a reasonable cause, a sporadic reading may be due to an intermittent electronics issue. Sometimes these will follow day to night temperature swings. Ambient temperature in the electronics can be viewed in a historical trend.</p>
Sporadic (Full Scale) Level Reading	Cable Contacting Riser	<p>Inspect tank for agitation and/or long riser. If cable contact at riser is suspect a probe wire kit can be ordered from the TankScan Customer Care Team.</p>
Sporadic Level Reading	Obstruction in Tank Contacting MIR Cable	<p>Inspect tank opening, riser, and tank internals for potential contact points. A cable guard accessory can be ordered and installed to protect the cable from contacting the interference.</p>
	Sludge Build-up on Cable	<p>Inspect cable for sludge build up on the cable. Build up on the cable can cause reflections on the signal causing intermittent higher level measurements.</p>
	Damaged Cable	<p>Inspect cable for damage. Any small nick or imperfection can cause intermittent higher level measurements.</p>
	Moisture in Electronic Housing	<p>Inspect inside of housing for moisture. If moisture is noticed the monitor seal compromised and monitor should be replaced.</p>
	Electronics Failure	<p>As a last option if all above inspections do not yield a reasonable cause a sporadic reading may be due to an intermittent electronics issue. Sometimes these will follow day to night temperature swings. Ambient temperature in the electronics can be viewed in a historical trend.</p>

TankScan Technical Support
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