

# TROUBLESHOOTING

Problem	Possible Causes	Check/Remedy
No output (0.00 mA)	<p>No power to sensor</p> <p>Blown fuse</p> <p>Reversed supply polarity</p> <p>Sensor failure</p>	<p>Check voltage at supply terminals in sensor.</p> <p>Check fuse and replace if needed. Use a 500 mA (1/2 Amp) 2AG (5mm x 15mm) fuse. If fuse continues to blow, check for water in sensor.</p> <p>Be sure the power supply has the correct polarity.</p> <p>If sensor has proper voltage at supply terminals, fuse has been replaced and still has no output, the sensor should be evaluated at our facility.</p>
Output will not zero to 4.00 mA.	<p>Too much scattered light (high turbidity) in sample.</p> <p>Too much ambient light or too much reflected light</p> <p>Poor sensor connections or incorrect wiring</p> <p>Sensor leads not insulated from body of sensor or conduit</p> <p>Wet connection in converter or sensor housings</p> <p>Failed sensor</p>	<p>Remove sensor and place in clean water with a cover to shield ambient light.</p> <p>Try repositioning the sensor to reduce reflection inside the pipe. PVC plastic pipes must be wrapped with metallic tape or foil to block ambient light from passing through to the sensor.</p> <p>Check connections and wiring.</p> <p>Check sensor wires.</p> <p>Look for water or condensate on connections. Dry if needed.</p> <p>Cover light source at tip of sensor and place sensor tip in dark box. If output still will not zero, then the sensor has possibly failed.</p>
Unstable reading	<p>Air bubbles or very large particles in process line</p> <p>RFI pickup</p> <p>Heavy Inductive loads</p>	<p>Take sample and check for bubbles or large particles. If present relocate sensor.</p> <p>Earth ground instrument properly.</p> <p>Mount instrument away from power cables. Put cables in conduit.</p>
Reading does not agree with lab results	<p>Improper calibration</p> <p>Lab procedure error</p> <p>Lab instrument error</p>	<p>Recalibrate instrument.</p> <p>Check procedure.</p> <p>Check instrument.</p>
Readings drift with time	<p>Converter not warmed up</p> <p>Sensor/converter connections wet</p> <p>Deposit buildup on sensor</p>	<p>Warm up converter for 5 minutes.</p> <p>Look for water or condensate on connections. Dry connections with hair dryer. Make sure cable gland and box cover are sealing properly.</p> <p>Remove sensor and clean.</p>
Negative readings or output is below 4.00 mA	<p>Sensor out of calibration</p> <p>Wet or damp connections</p> <p>Faulty sensor bulb</p>	<p>Check calibration</p> <p>Dry connections with hair dryer. Make sure cable gland and box cover are sealing properly.</p> <p>Check to see if sensor lamp is on. If lamp is off, the sensor should be evaluated at our facility.</p>