2. Maintenance for WSNBM-AQUA

2.1 Troubleshooting

Please find below steps to identify the problems from Communication Part or Sensor Part:

- If the device cannot connect to the MQTT broker at the first time, it is the Communication Problem;
- If the device status like battery, RSSI level, data status or other communication is normal, but the measured values are not updated or wrong, it would be the problems of Sensor part;
- If the data coming to MQTT broker is not frequently as expected, the problem would be Communication. Please refer below the troubleshooting guide for Communication and Sensor Part.

2.1.1. Troubleshooting for Communication

2.1.2. Troubleshooting for Sensor Part

Symptom	Cause	Solution
Modbus value remains unchanged on Aqua Logger and/or Modbus Exception = 0x000F is returned from modbusHexValue data, indicating an error in the Modbus RTU communication process	The slave device is not powered or has failed, resulting in no data response.	Check visually, verify power supply and ensure the Slave Device is operational.
	The RS485 communication port on the slave device is damaged/malfunction or not transmitting.	Test the slave device with another Modbus master/PC or use RS485 diagnostic tools to confirm signal output.
	The RS485 cable between Aqua Logger and the slave device is damaged, disconnected, or loose connection.	Perform visual inspection, continuity testing, and ensure all M12/terminal connectors are properly tightened.
	The RS485 port on Aqua Logger is defective or hardware failure.	Verify using the configuration software or RS485 test tools, or contact Daviteq support.
	Modbus communication configurations such as Slave ID, Baud rate, Parity, Stop Bit have been modified accidentally.	Check and restore correct settings to match the Aqua Logger’s communication configuration.
	Aqua Logger’s RS485 Modbus settings have been modified accidentally.	Use the Daviteq configuration Modbus tool with customer template to read, verify, and restore the correct settings.

2.2 Maintenance

There is no requirement for maintenance of the Hardware of the sensor

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