

Wastewater Treatment Sensor Interface

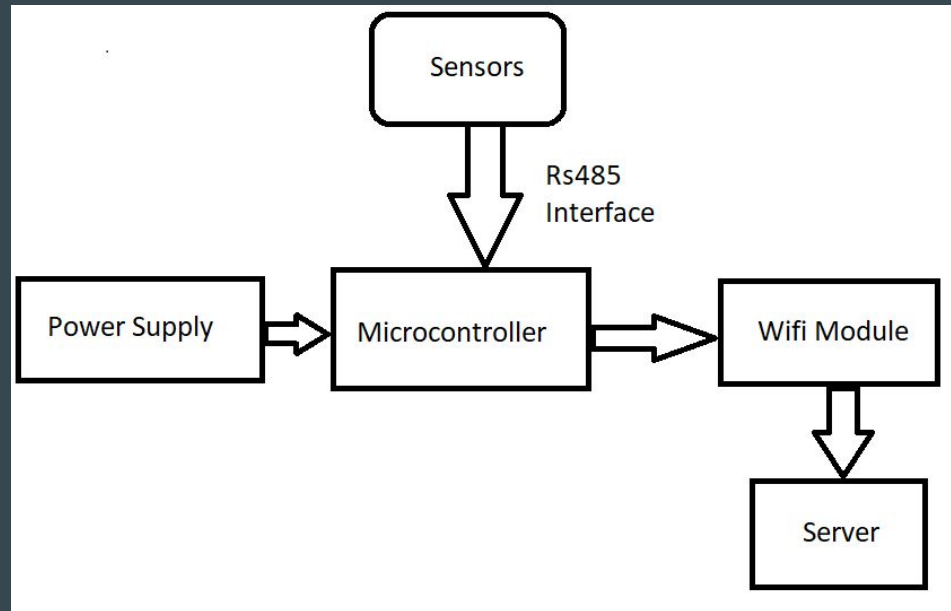
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September 1, 2021

Overview

- Block Diagram
- Rs485 Communication Protocol Specification
- Sensors

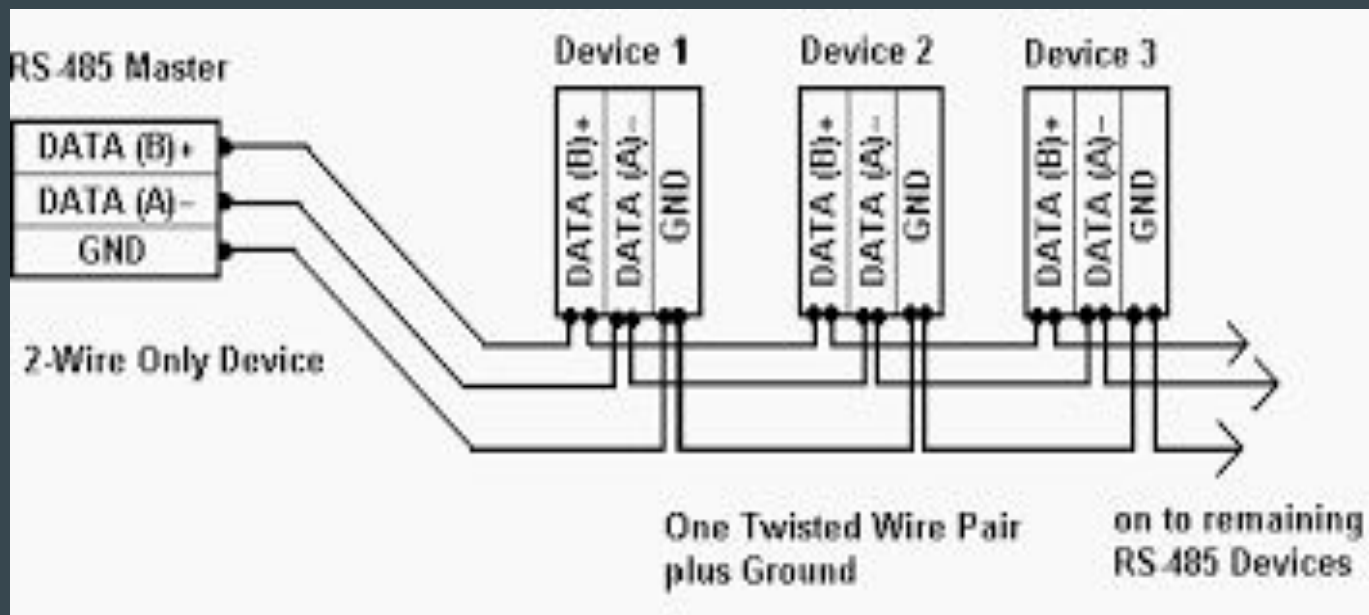
Block Diagram



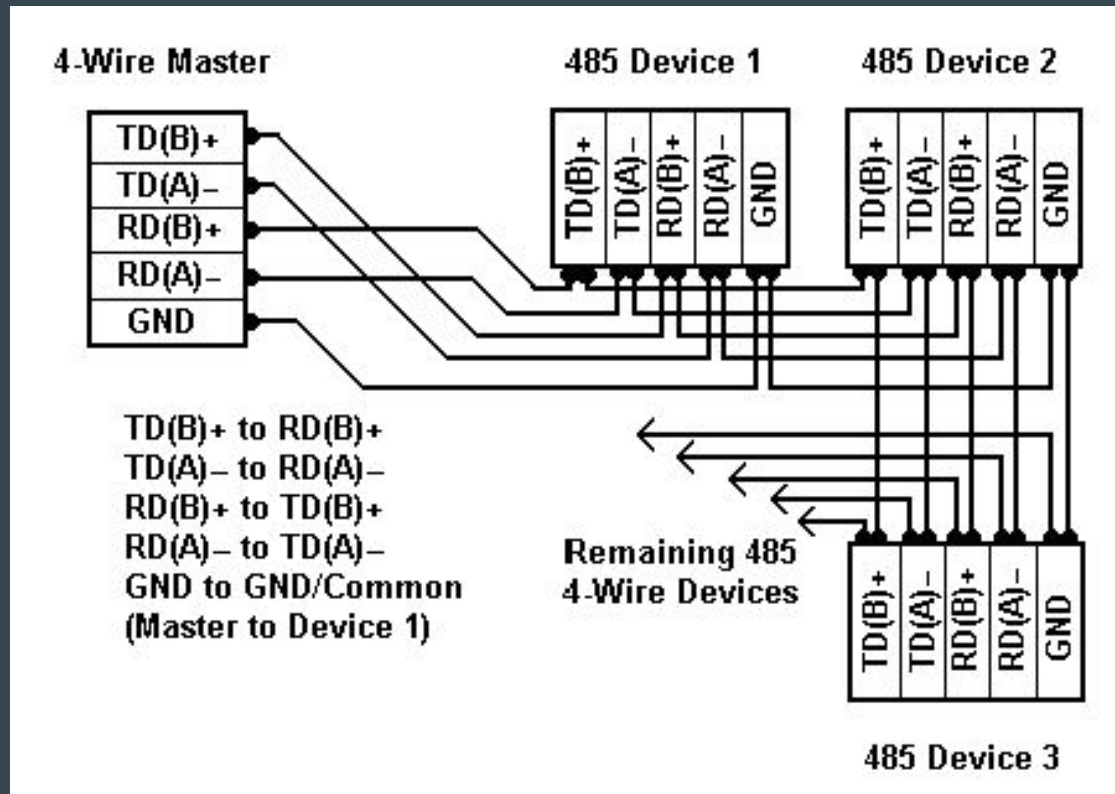
Rs485 Specifications

- Max number of drivers 32
- Max number of receivers 32
- Modes of operation half duplex or full duplex
- Network topology multipoint
- Max distance (acc. standard) 1200m
- Max speed at 12m 35Mbps
- Max speed at 1200m 100kbps

2 Wire Half Duplex Connection



4 Wire Duplex Connection



PH Sensors

1. <https://www.seeedstudio.com/RS485-pH-Sensor-S-pH-01A-p-4632.html>

Price: Rs 10500

Universal Protocol: RS485



2.

https://www.alibaba.com/product-detail/BGT-D718-PH-Water-Quality-Monitoring_62470620532.html?spm=a2700.galleryofferlist.normal_offer.d_title.3933975b9QnmYr

Price: Rs 5200

Universal Protocol: RS485



Turbidity Sensor and TSS (Total Suspended Solids) Sensor

1.

<https://www.tradeindia.com/products/nephelometer-rs485-4-20ma-output-turbidity-sensor-c5554403.html>

Price: Rs 45000

Universal Protocol: RS485



2.

https://www.alibaba.com/product-detail/RK500-07-IP68-Optical-Digital-Online_62368625430.html?spm=a2700.galleryofferlist.normal_offer.d_title.61644b63YWlb70

Price: Rs 45000

Universal Protocol: RS485



TDS (Total Dissolved Solids) Sensor

1. https://www.alibaba.com/product-detail/BGT-D718-4-20ma-or-RS485-Modbus-Conductivity_62467992655.html?mark=google_shopping&seo=1

Price: Rs 5200

Universal Protocol: RS485



2. <https://www.seeedstudio.com/EC-RS485-p-4848.html>

Price: Rs 10300

Universal Protocol: RS485



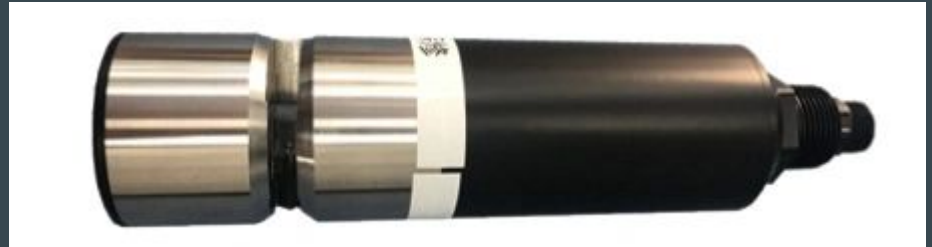
COD (Chemical Oxygen Demand) Sensor and BOD (Biochemical Oxygen Demand) Sensor

COD Sensor

<https://m.made-in-china.com/product/Digital-Chemical-Oxygen-Demand-Electrode-Probe-COD-Sensor-RS485-904696955.html>

Price: Rs 150000

Universal Protocol: RS485



BOD Sensor

https://www.alibaba.com/product-detail/beer-dissolved-oxygen-and-bod-meter_62308198393.html?mark=google_shopping&seo=1

Price: Rs 33000

Universal Protocol: RS485



COD and BOD Sensor

https://www.alibaba.com/product-detail/Chemical-Oxygen-Demand-Waste-Water-Treatment_1600110713259.html

Price: Rs 750000

Universal Protocol: RS485



Flow Meter Sensor

1. https://www.alibaba.com/product-detail/Low-price-flow-meter-water-RS485_60735212590.html?spm=a2700.galleryofferlist.normal_offer.d_title.50b595194mEUiW

Price: Rs 20000

Universal Protocol: RS485



2.

<https://www.indiamart.com/proddetail/mag-flow-meter-with-rs485-modbus-19008996991.html>

Price: Rs 19000

Universal Protocol: RS485



- VS Sensor and Coliforms Sensor are not included in the list.
- There are little documents and details available about these sensors.
- Need some more information like the price range and detailed specification about these sensors.

Thanks