MKC Waste Water and Power Management System

10/01/2022

Proteus Instrument

Single solution for the Wastewater Treatment Plant

Parameters :   BOD, COD, TOC, DOC, Dissolved Oxygen, Pressure, Chloride, pH,

Temperature, Optical Brighteners, Nitrate, ORP / REDOX, Coliforms

(faecal, E. coli, total), Tryptophan, Refined Oils, Ammonium, EC / Salinity / TDS,

Turbidity, Crude Oils, CDOM

Internal Battery Life : 1 to 24 month depending on sensors / logging rates

Power Supply   : 5 - 15 vdc
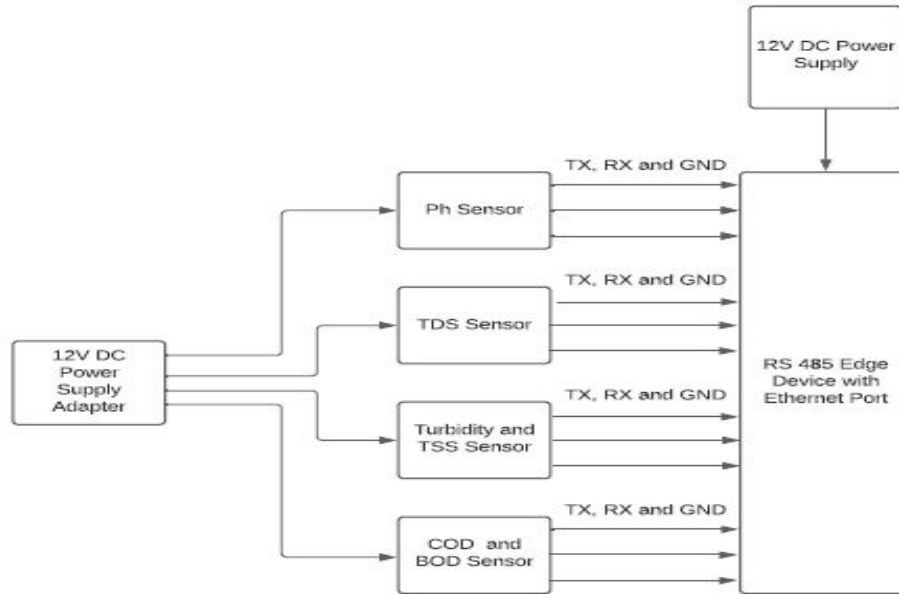
Communication   : USB, RS232 as standard. Modbus RS485, SDI-12 and/or Bluetooth optional
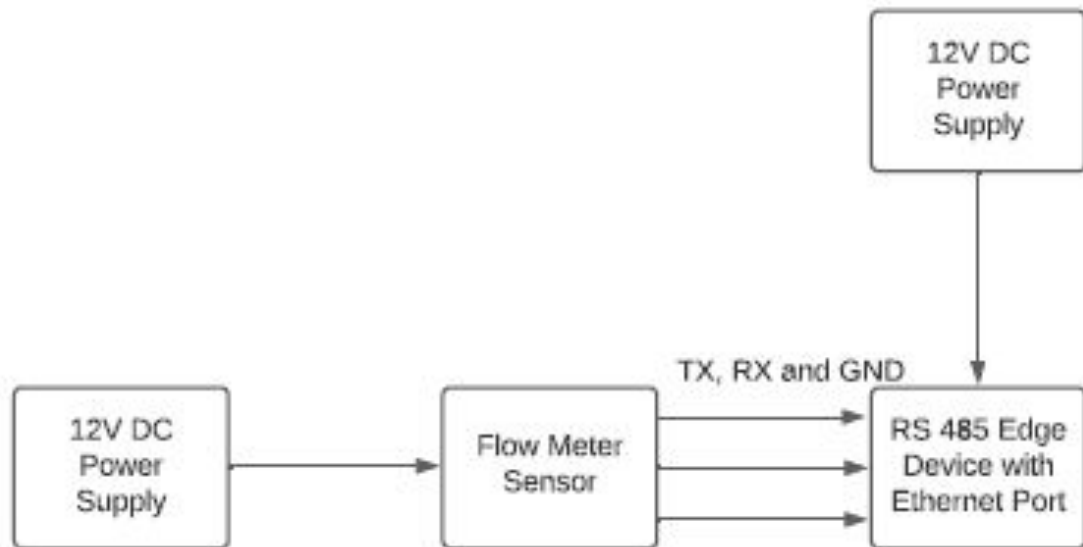
Data Memory   : >1,000,000 logged readings
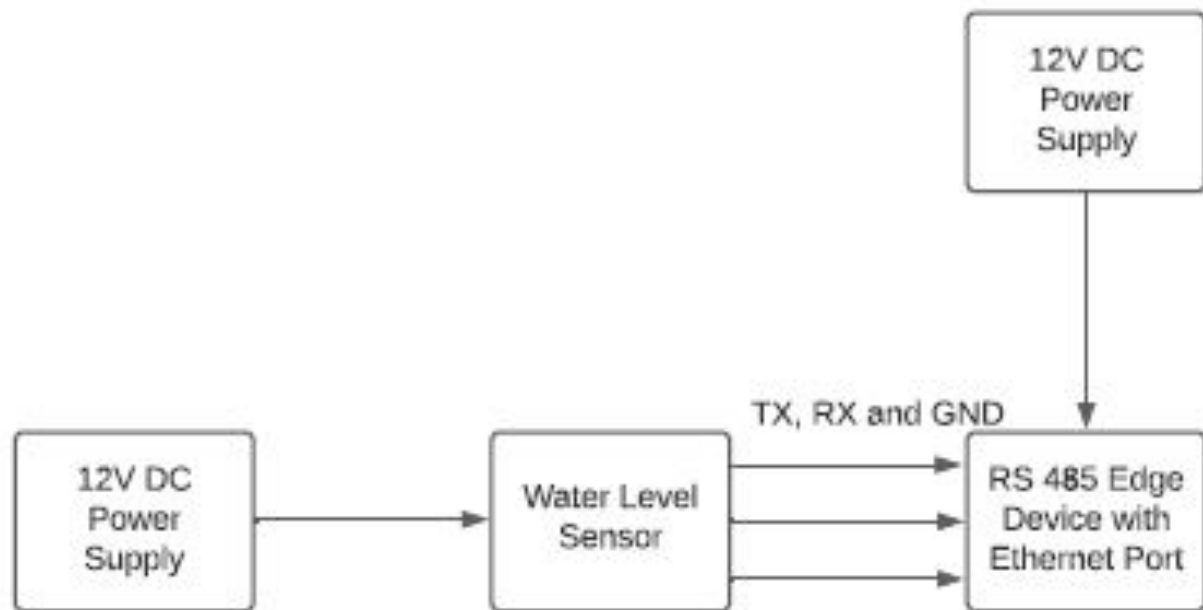
Depth Rating   : 200 m

Operating Temperature : 0 to 50°C, non-freezing

Integrated Solution Block Diagram

Ph Sensor

Power Supply : 3.6 ~ 30V DC

Communication : RS-485

Range : 0 to 14 pH

Cable Length : 5 meters

IP Rating : IP65

Operating Temperature : -40 ~ 85 degree Celsius

Turbidity and TSS Sensor

Power Supply	:	12 - 24V DC
Communication	:	RS485, 4 - 20mA
Range	:	0 - 4000 NTU
Cable length	:	5m default
IP Rating	:	IP68
Operating Temperature	:	0 -+ 80 C

TDS Sensor

Power Supply   :   3.9 - 30V/DC

Communication   :   RS485 Modbus-RTU

Range   :   0 - 20000us/cm

Cable Length :   Power and Signal Cable ：2 meters or Customize

                              Electrode Cable :   5 meters

IP Rating   :   Electrode   :   IP68,

                                    Transmitter   :   IP65

Operating Temperature   :   -40 ~ 80°C

COD and BOD Sensor

Power supply : 12VDC

Communication : RS485 Modbus

Range : 0-200mg, 0~1000mg/l COD (2mm optical path)

Cable length : Standard 10m cable, can be extended to 100 meters

IP Rating : IP68/NEMA6P

Water Level Sensor

Power Supply : 11 - 30V DC

Communication : RS485 Modbus-RTU Protocol

Range : 0 ~ 5 meters

Cable Length : 5.3 meters

IP Rating : IP68

Digital Flow Meter Sensor

Power Supply : 230 VAC, 110 VAC & 12VDC or Battery Operated

Communication : Std. 4 20 mA / RS 485 on request / Pulse output

Range : 0.5 m/sec for Minimum & 5m/sec for Maximum

Cable Length : 10 meters

IP Rating : IP 65

Diameter : 15 to 400 mm

Process Pressure : Max. 25 kg/cm2

Process Temperature : Max. 150 C

RS485 Edge Device

Power Supply   :   12VDC(9~48VDC)

Communication :   Ethernet

                                    Speed   :   10/100Mbps

                                    Distance   :   100m

                                    Connector   :   RJ45

                   RS485

                                    Band rate   :   300bps -115200bps

                                    Distance   :   1200m

                                    Port Numbers   :   8

                                    Signal   :   D+(A), D-(B)

IP Rating   :   IP30 protection, metal shell

Configure IP address, server and client mode, data bag size etc

Real COM driver working mode

Support cross-gateway and cross-router communication

Energy Meter

Power Supply: 230 VAC

Displays   :   Active Energy (kWh),PF, Active Power(kW), Voltage

(Line to Line & Line to Neutral),Current, Frequency,

Run Hour, Load Hour

Communication   :   RS 485

IP Rating   :   IP 55

Metering Standard   :   IEC 62053-21/22

Old energy register back-up for re-start energy reading.

Password Protected

Thank You