

PUMP AUTOMATION OVERVIEW

The pump automation system is housed inside a weather tight box that contains a telemetry unit, solar charger, battery and panel mounted connections for:

- ✓ Digital Inputs: On/Off Conditions, Floats, Flowmeter, Etc.
- Digital Outputs: Emergency Stop, Audible & Visible Alarm, Etc.
- ✓ Analog Inputs: Level, Pressure, Flowmeters, Temperature, Etc.
- Modbus RTU: Flowbus, Temperature, Water Quality, Etc.
- CANbus ECU (Engine Control Unit): Engine Diagnostics and Values
- ✓ Cellular w/ External Antenna: Verizon or AT&T LTE Service
- 40W Solar Panel: Connected to Pump Battery



Monitoring & Control

- ✓ Fully autonomous operation or remote operator control
- ✓ System communicates via CANBus protocol to both the panel and ECU allowing the operator to:
 - ✓ View all engine & pump date (RPM, Pressures, Temperatures, Key State, Etc)
 - ✓ Start/Stop pump engine via web dashboard
 - ✓ Automatically perform emergency stops
 - ✓ View translated ECU Diagnostics
- Alerts via Phone/Text/Email for start/stop, high/low, and other user definable parameters



TANK AUTOMATION OVERVIEW



The tank monitoring system is housed inside an easily deployable weather tight box that can be powered by 110v AC or solar power.

- ✓ Digital Inputs: On/Off Conditions, Floats, Flowmeter, Etc.
- ✓ Digital Outputs: Emergency Stop, Audible & Visible Alarm, Etc.
- ✓ Analog Inputs: Level, Pressure, Flowmeters, Temperature, Etc.
- ✓ Modbus RTU: Flowbus, Temperature, Water Quality, Etc.
- ✓ Cellular w/ External Antenna: Verizon or AT&T LTE Service

Monitoring & Alerts

- Remotely view multiple tank levels
- Tank levels can be displayed in heigh or volume
- Alerts via Phone/Text/Email for start/ stop, high/low, and other user definable parameters
- Display page can be integrated into the same job profile as pumps













