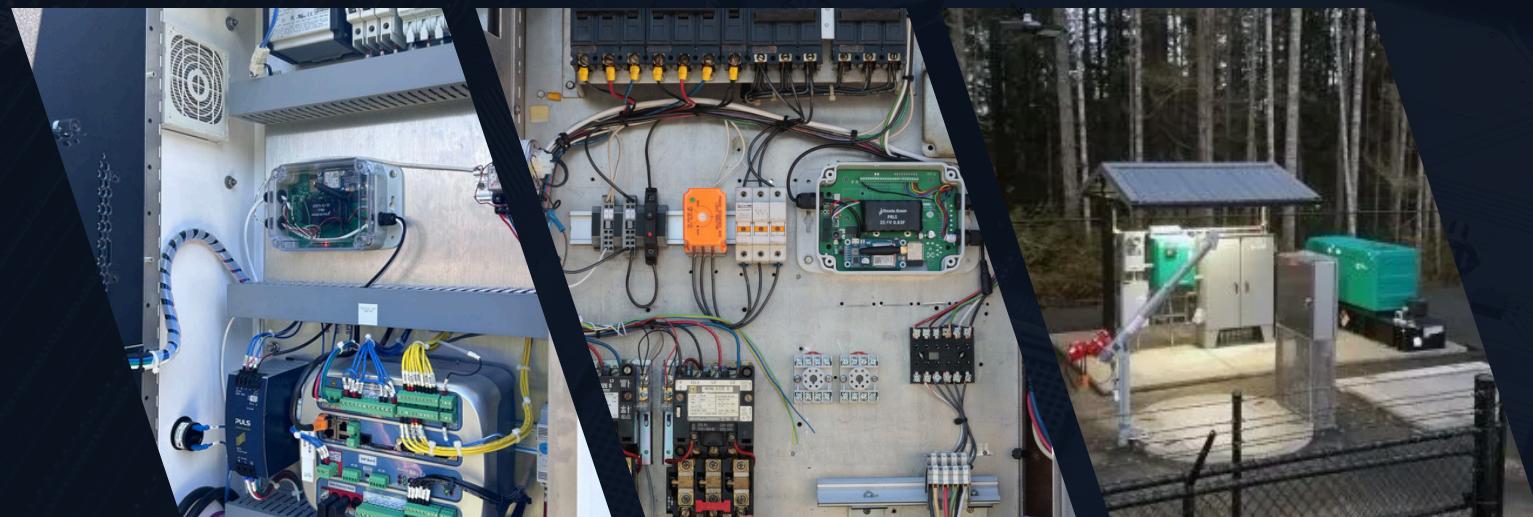


# RMC-1000/2000/2000I INSTALLATION & USER MANUAL



# Table of Contents

---

## INSTALLATION

**Pg.3** Mounting

**Pg.4** RMC-1000/2000 Wiring Diagram Digital Inputs/Outputs

**Pg.5** RMC-1000/2000 Wiring Diagram Analog Inputs

**Pg.6** RMC-2000i Wiring Diagram Digital and Analog Inputs

**Pg.7** Analog Isolator Wiring Diagram

## SETUP

**Pg.8** Apple and Android APP

**Pg.9** Local Access User Interface

**Pg.10** Connecting to the Server and User Interface

**Pg.11** Main User Dashboard

**Pg.12** Manage Profile and User Information

**Pg.13-16** Manage Sites

## USER INTERFACE

**Pg.17** Datapoints

**Pg.18** Events

**Pg.19** Controller List

**Pg.20** User Interface Main Screen

## DEVICE SETUP

**Pg.21** User Interface Device Setup

**Pg.22** Analog Input Configuration

**Pg.23** Digital Input Configuration

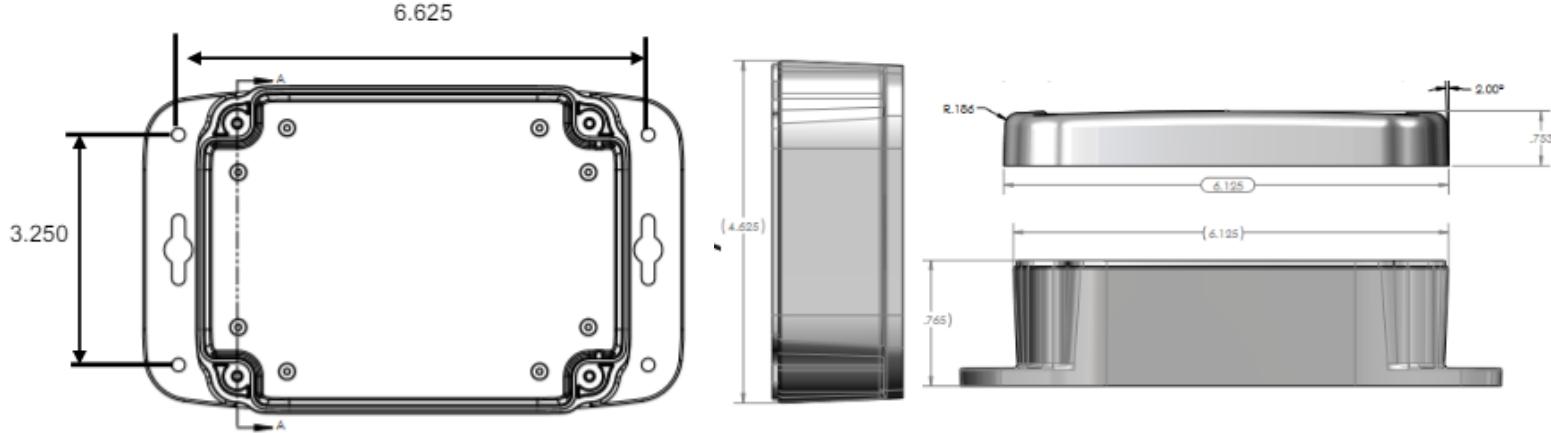
**Pg.24** Digital Output Configuration

**Pg.25** Digital Output Configuration 2



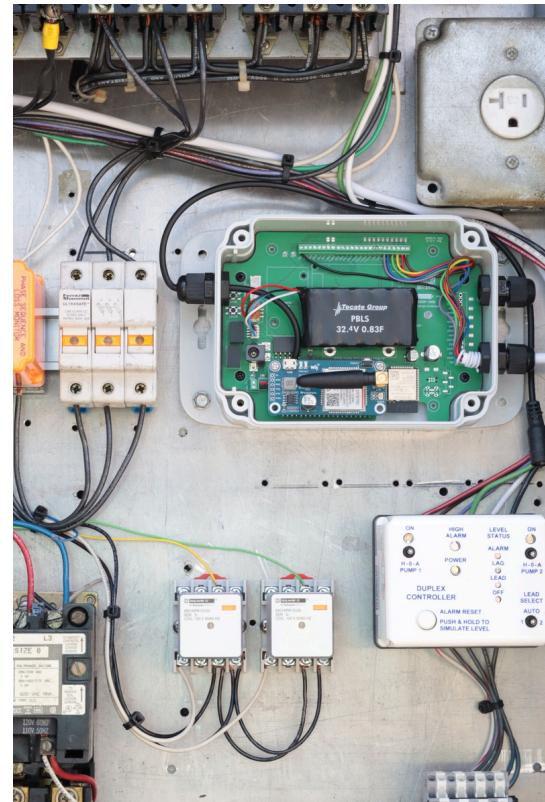
# INSTALLATION

## MOUNTING



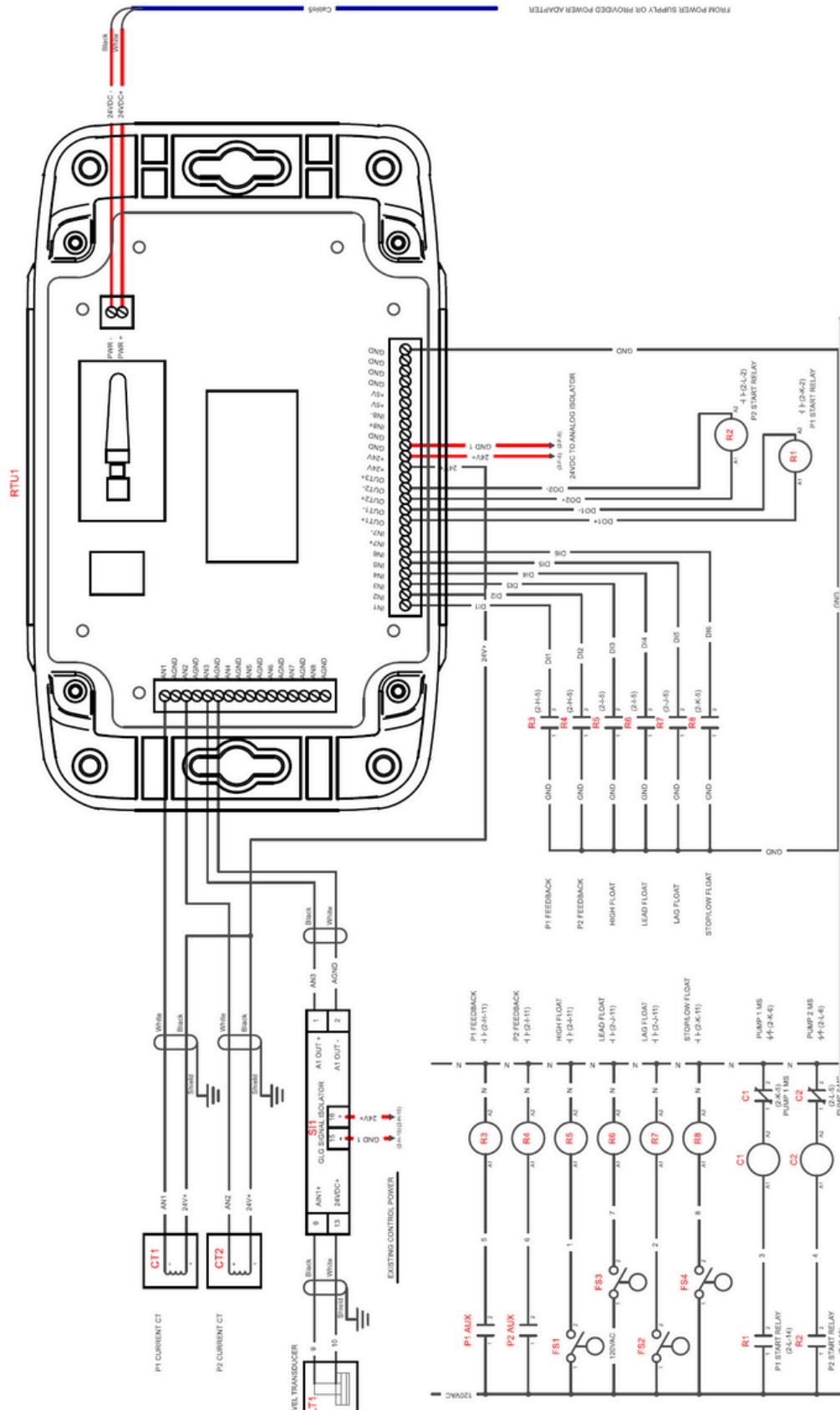
### MECHANICAL INSTALLATION:

Select suitable location as close to the control panel or location of the digital and analog IO points. Mount the controller using the predrilled four screw holes in each corner. The controller can be mounted inside of an existing panel or outside on the side of the panel or any available mounting space. The controller is weather proof.



# INSTALLATION

## WIRING DIAGRAM DIGITAL INPUTS/ RELAY OUTPUTS

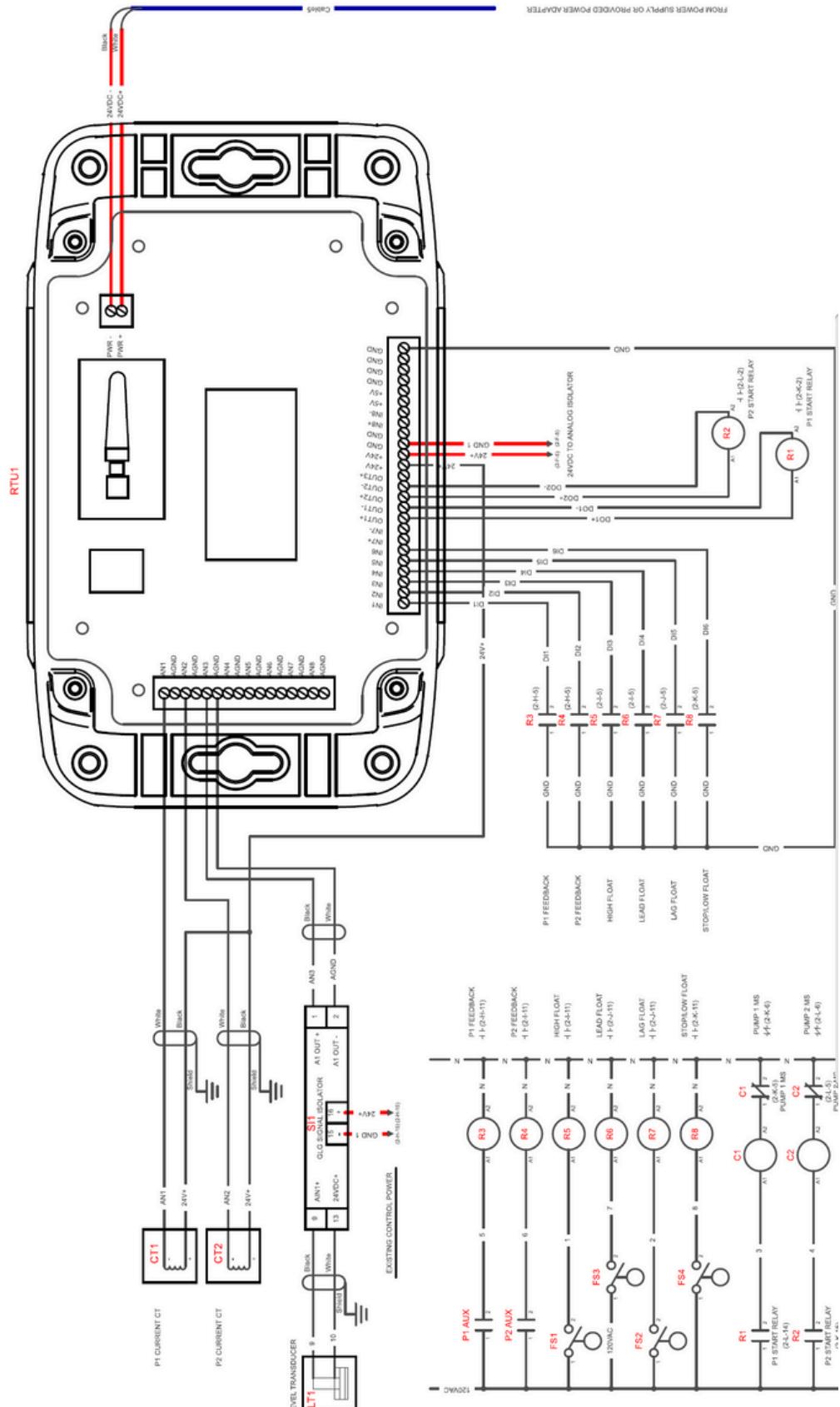


## INSTALLATION

---

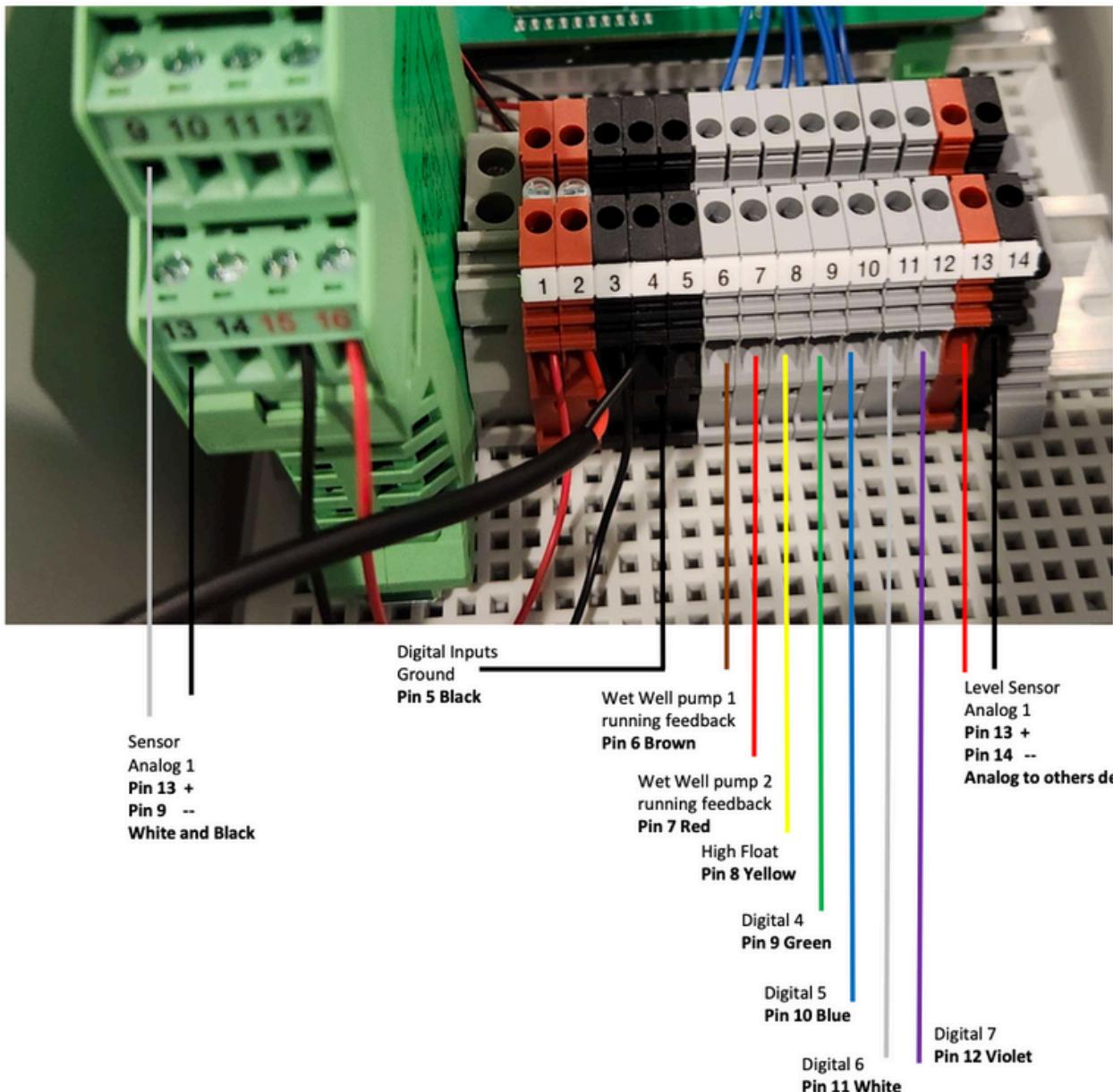
## WIRING DIAGRAM

## ANALOG INPUTS



# INSTALLATION

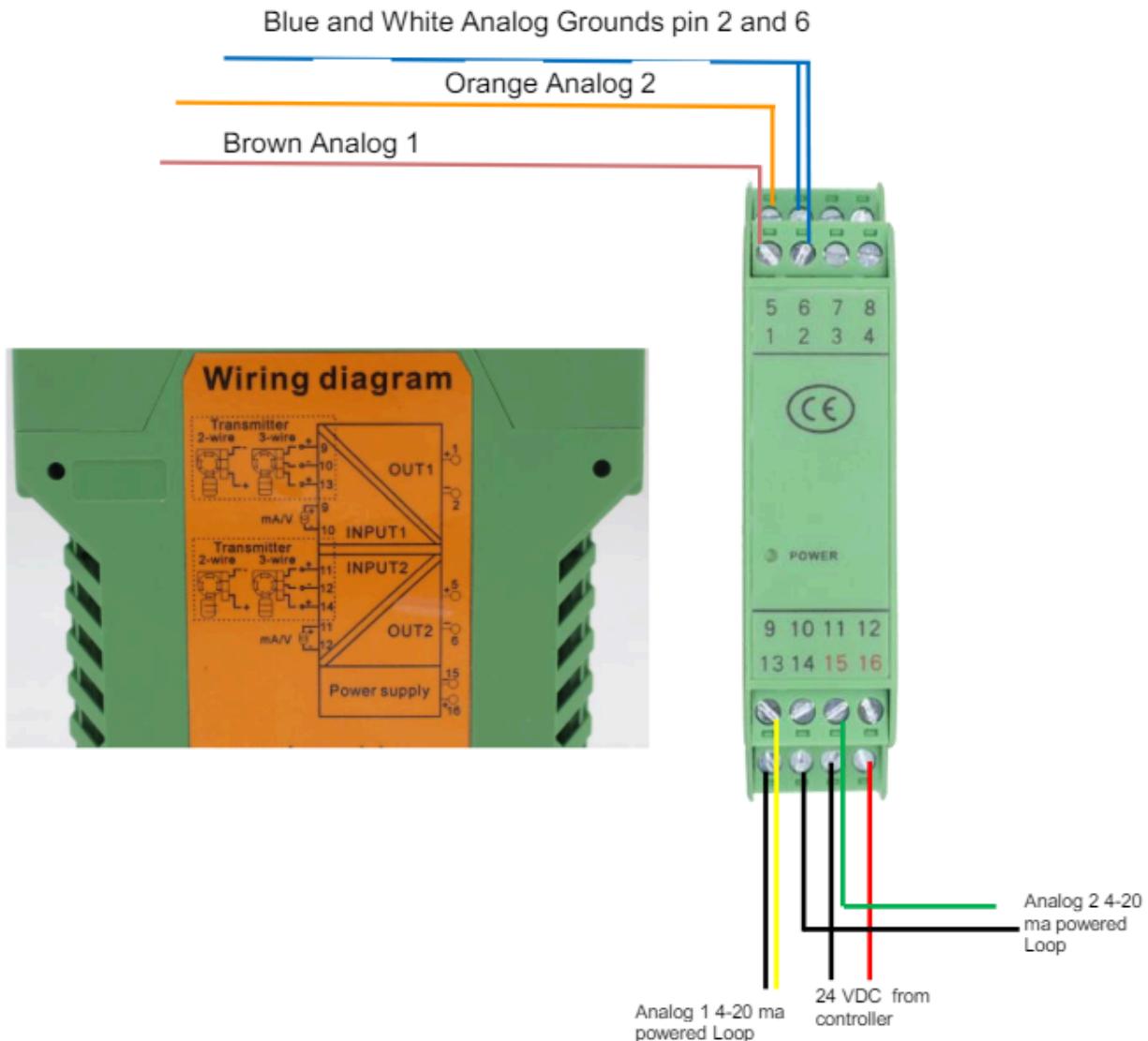
## WIRING DIAGRAM ANALOG ISOLATOR



# INSTALLATION

## WIRING DIAGRAM

### ANALOG ISOLATOR



## SETUP

### APPLE AND ANDROID APP

- Download the APP from our website.
- Connect to the local RMC WIFI network from network list. ( See image below.)
- Select the AccuDose icon.
- The APP will open up and there will be two selections available. The “Connect” button will connect you directly to the server and the cloud based user interface.
- The Setup button will connect you directly to the local user interface.
- Note: the smart device must be connected to the “RMC-2000” network in the WIFI network selection to connect directly to local access point.



# SETUP

## LOCAL ACCESS USER INTERFACE



Network Device

Network Setup

Mac Address: 94:3C:C6:46:0C:F0

Connect to Wifi  
 Enable Cellular Modem

APN

hologram

Signal Strength  
-69

(Device will disconnect from cellular network while updating the cell signal)

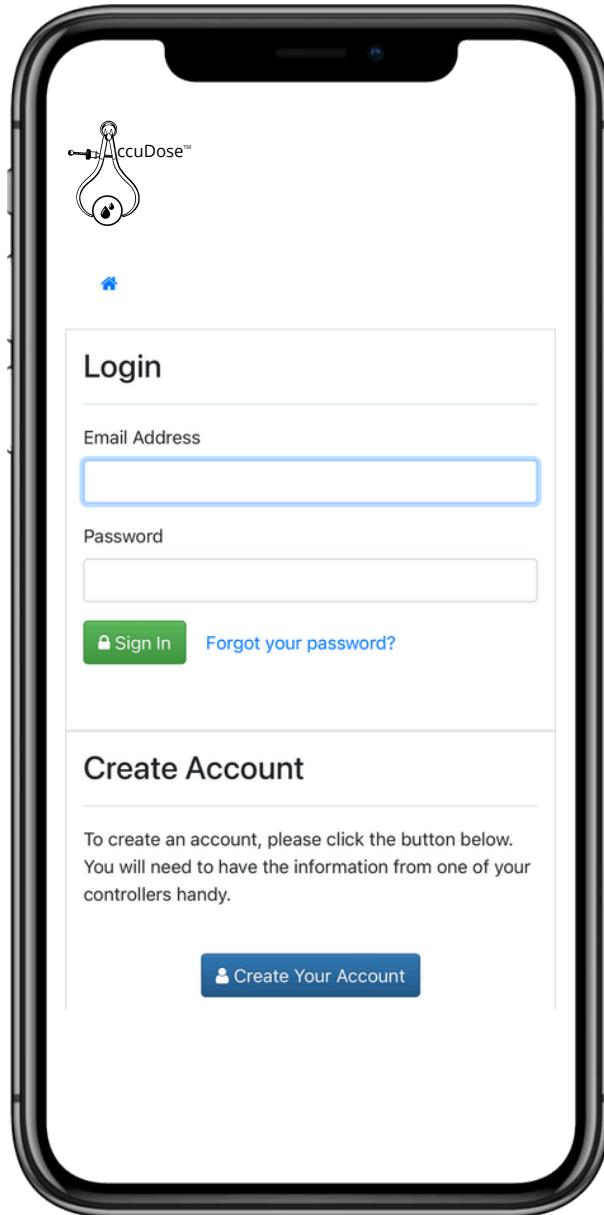
Update

Save Network Config and Reboot

- Mac Address: The electronic serial number of the device.
- Connect to Wifi: Check this box to connect device through the local Wifi network.
- Enable Cellular Modem: Check this box to connect device through Cellular.
- APN: the Cellular carrier APN address.
- Signal Strength: The signal strength of the Cellular connection to the tower.
- Save Network Config and Reboot: Save revised settings.

## SETUP

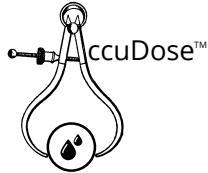
### CONNECTING TO THE SERVER AND USER INTERFACE



- Open up the APP and select “Connect”.
- The Server sign up screen will appear (See Diagram 1 Below).
- Enter the “Email Address” and “Password” supplied with unit.
- Then select “Sign In”.

# SETUP

## MAIN USER DASHBOARD



[My Account](#)

### My Account

Welcome to your dashboard. Here you can manage all your controller information and programming.

#### Sites

2

[View List](#)

#### Controllers

9

[View List](#)

#### Logs

 [Datapoints](#)

 [Events](#)

#### Users

4

[View List](#)

#### Notifications

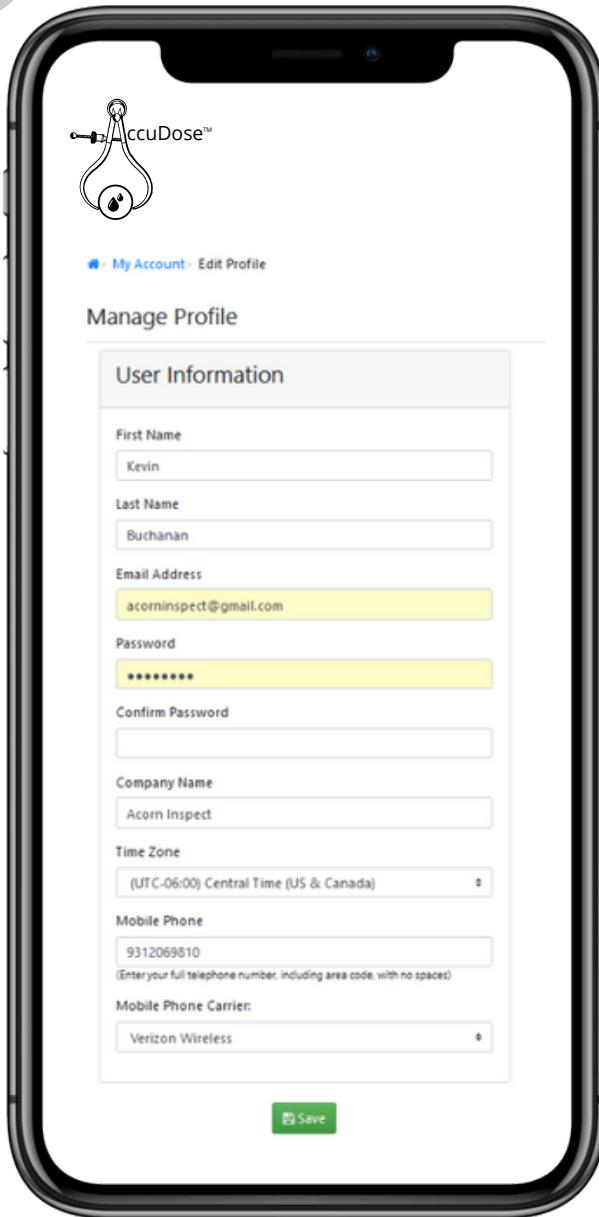
Kevin Buchanan

[Re-assign](#)

- My Account - Setting up individual profile (page 11).
- Sites- List of Sites (page 12).
- Users- List of all of the users for the notifications (page 13).
- Notifications- Select who will receive the alarms and notifications (page 14-15).
- Datapoints- Logs of all the analogs and digitals (page 16).
- Events- Logs of all of the actual events (page 17).
- Controllers- List of the users controllers (page 18).

## SETUP

### MANAGE PROFILE AND USER INFORMATION



- First Name- User's first name.
- Last Name- User's last name.
- Email Address- User's email address.
- Password- Assigned password.
- Company Name- Organization name.
- Time Zone- The time zone where the system is located.
- Mobile Phone- User's mobile phone number for texts and emails.
- Mobile Phone Carrier- The cellular carrier of the user's cell phone

## SETUP

### MANAGE SITES



#### Site List

[Add New Site](#)

Site Name	Address	Country	Manage Controllers	Edit
Demo		United States		
Tank	1250 Walter Head Road Cedar Hill TN	United States	Manage Controllers	Edit

- Site List- All sites can be managed, edited, or a new site added.

[My Account](#) > [Manage Sites](#) > [Add Site](#)

#### New Site

Site Information	
Site Name	<input type="text"/>
Address	<input type="text"/>
Address 2	<input type="text"/>
Country	<input type="text" value="United States"/>
City	<input type="text"/>
State	<input type="text"/>

[Save](#)

## SETUP

### MANAGE USER AND NOTIFICATIONS



» My Account > Manage Users

#### User List

Add New User

Name	Email	
Enzo Lebeau	llebeau@accu-dose.com	Edit
John Smith	kbuchanan37043@yahoo.com	Edit
Kevin Buchanan	acorinspect@gmail.com	Edit
Shivan LINGAM	saaigm@gmail.com	Edit

- User List- All users can be managed, edited, or a new user added.

# SETUP

## MANAGE USER AND NOTIFICATIONS



### User Information

First Name: Richard

Last Name: Cunha

Email Address: rccunha@comcast.net

Password: (hidden)

Confirm Password: (hidden)

Role: Manager

Time Zone: (UTC-05:00) Eastern Time (US & Canada)

Mobile Phone: 5086429911  
(Enter your full telephone number, including area code, with no spaces)

Mobile Phone Carrier: Verizon Wireless

Sites

All Sites  Demo  Tank

Save

Managers: have access to any sites that they've been allowed to see and can be set to receive notifications

Users: are the same as Managers but cannot get notifications.

View-only Users: can only view units and cannot update config. If a view-only user tries they'll be prevented from doing so (they can still see the current config).

Role

Manager

Manager

User

View-Only User

Sites: These are the specific sites that this manager can access from the server. You can select All Sites or only the checked sites.

## SETUP

### MANAGE USER AND NOTIFICATIONS



> My Account > Manage Users

#### User List

[Add New User](#)

Name	Email	
Enzo Lebeau	llebeau@accu-dose.com	<a href="#">Edit</a>
John Smith	kbuchanan37043@yahoo.com	<a href="#">Edit</a>
Kevin Buchanan	acorninspect@gmail.com	<a href="#">Edit</a>
Shivan LINGAM	saaigm@gmail.com	<a href="#">Edit</a>

- User List- All users can be managed, edited, or a new user added.



> My Account

#### Notifications

This page allows you to select who will receive all the selected notifications in your account. A user must be given the manager role to show up here, which you can do by editing their account.

Select which users you would like to receive all controller notifications under this account.

Enzo Lebeau  
 John Smith  
 Kevin Buchanan  
 Shivan LINGAM

Save

- Notifications List- Select user to be notified.

# USER INTERFACE

## DATA POINTS

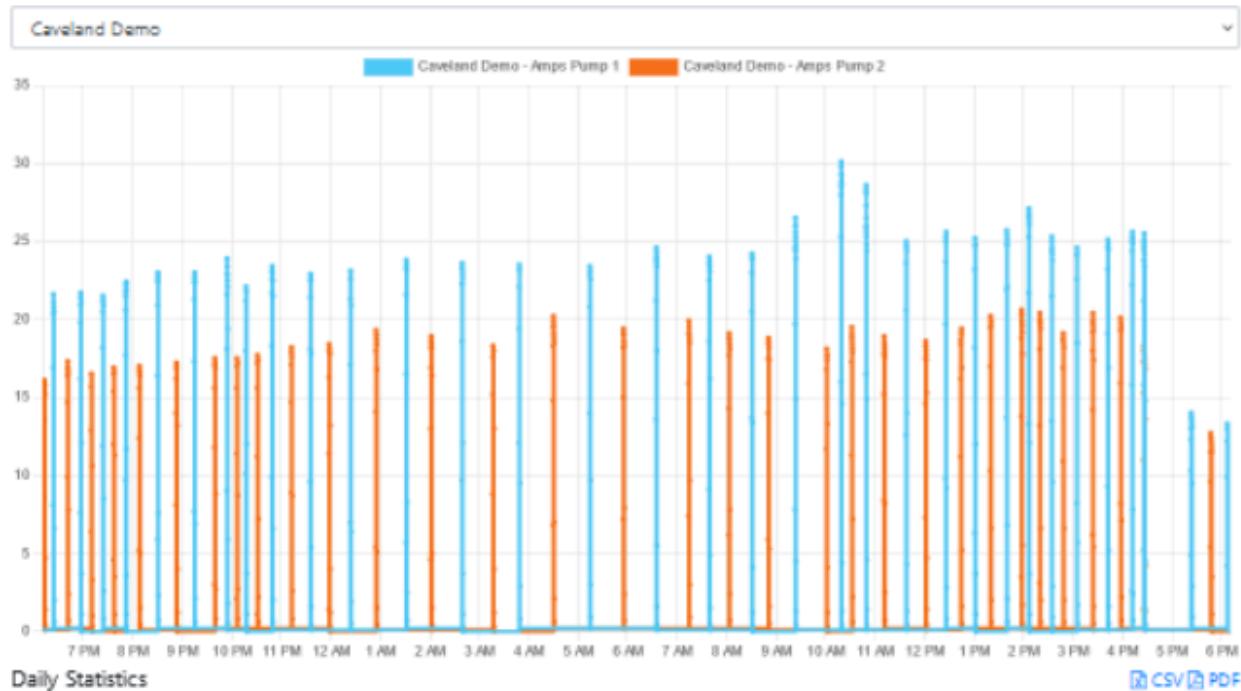


[My Account](#) > [Data Logging Reports](#)

### Data Logging Report

#### Analogs

Choose a device from the dropdown to update the graph. Click on any of the sensors in the legend to toggle their visibility.



Controller Name	Variable	Info	Date
<input type="text"/>	<input type="text"/>	<input type="text"/>	From: 2021-11-30 To: 2021-12-07 <input type="button" value="Search"/>
Cleveland Demo	Pump 1	Starts: 50	2021-12-06
Cleveland Demo	Pump 1	Runtime: 01:12:40	2021-12-06
Cleveland Demo	Pump 2	Starts: 51	2021-12-06
Cleveland Demo	Pump 2	Runtime: 01:10:19	2021-12-06

- Datapoints- All analog and digital historical data can be viewed and also CSV or PDF files can be downloaded.

# USER INTERFACE

## EVENTS



[Home](#) > [My Account](#) > Event Logging Reports

### Event Logs

[CSV](#) [PDF](#)

Controller Name	Date	Action	Info
	<b>From:</b> 2021-11-30 <b>To:</b> 2021-12-07 <b>--All Events--</b> 		
Caveland Demo	2021-12-07 17:08:25	Pump changed	Pump 1 off
Caveland Demo	2021-12-07 17:07:00	Pump changed	Pump 1 on
Caveland Demo	2021-12-07 16:48:30	Pump changed	Pump 2 off
Caveland Demo	2021-12-07 16:46:55	Pump changed	Pump 2 on
Caveland Demo	2021-12-07 16:24:34	Pump changed	Pump 1 off
Caveland Demo	2021-12-07 16:23:10	Pump changed	Pump 1 on
Caveland Demo	2021-12-07 15:27:31	Pump changed	Pump 2 off
Caveland Demo	2021-12-07 15:27:30	Pump changed	Pump 1 off

- Events- All analog and digital historical event can be viewed and also CSV or PDF files can be downloaded.

# USER INTERFACE

## CONTROLLER LIST



[My Account](#) > Manage Controllers

### Controller List

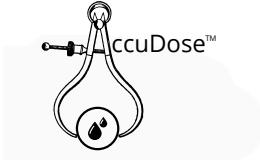
[Add New Controller](#)

Controller Name	Site Name	MAC	
AB12	Demo	461014	<a href="#">View</a> <a href="#">Stats</a> <a href="#">Edit</a>
AECOM Demo	Tank	CAAEEC	<a href="#">View</a> <a href="#">Stats</a> <a href="#">Edit</a>
BP Process 23	Demo	460CF0	<a href="#">View</a> <a href="#">Stats</a> <a href="#">Edit</a>

- Controller List- All controllers can be managed, edited, or a new added added.

# USER INTERFACE

## USER INTERFACE MAIN SCREEN

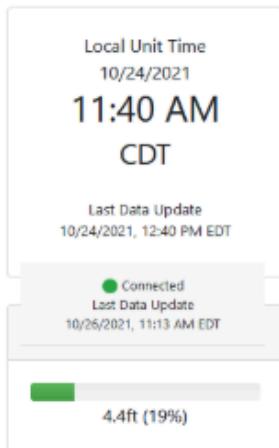


[My Account](#) > [Manage Controllers](#) > [View Controller](#)



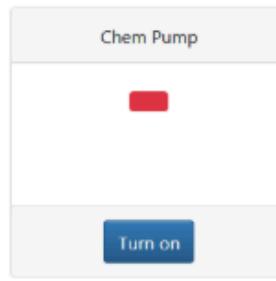
Michael Drive

Setup



Pumps			
#	State	Starts	Runtime
1	Red	0	0:00
2	Green	12	120:11
3	Red	0	0:00

Triggers	
High Wet Well	Light Blue
High High Wet Well	Light Blue



Copyright © 2021 Accudose

- Name of site: Michael Drive
- Local unit time: Local time at controller location via the internet.
- Connected: Displays the status of the connection between local controller and the cloud based server.
- Pumps: Shows the current state of the pump, number of starts of each pump, and the actual runtime of each pump.
- Triggers: Displays the status of high wet well or other alarms.
- Chem Pump: Displays the status of the chemical feed pump in dosing mode.
- Wetwell: Displays real time level of the wetwell.
- Chemical Tank 1 Level: Displays real time level of the chemical tank.

# DEVICE SETUP

## USER INTERFACE DEVICE SETUP

» My Account > Manage Controllers > Remote View: Pulsar



Pulsar

Setup

Application

Device Setup

Name

Pulsar

Time Zone

(UTC-05:00) Eastern Time (US & Canada)

Analog Sensor Config

Show/Hide

Digital Sensor Config

Show/Hide

Output Config

Show/Hide

MODBUS Config

Show/Hide

Save Device Config

Copyright © 2023 AccuDose

- Time Zone: Set your local Time Zone.
- Name: Set the name of this controller.
- Analog Sensor Config: Select Show/Hide button.
- Digital Sensor Config: Select Show/Hide button.
- Output Config: Select Show/Hide button.
- MODBUS Config: Select Show/Hide button

# DEVICE SETUP

## ANALOG INPUT CONFIGURATION

Analog Sensor Config

Show/Hide

<b>Analog 1</b>	<b>Analog 2</b>
Type	Type
Wet Well Tank	Chemical Tank
Name	Name
Wet Well Tank Level	Analog Input 2
Mode	Mode
4-20mA Low->High	4-20mA Low->High
Sensitivity <small>?</small>	Sensitivity <small>?</small>
2	2
Units	Units
Inches	Inches
Gallons/Inch	Gallons/Inch
Low	Low
-1	-1
High	High
50	45
Max	Max
Alarm Delay (sec)	Alarm Delay (sec)
0	0

- Type- Type of analog being monitored e.g. wet well, chemical tank, flow, etc. Select drop down menu to chose type of analog.
- Name- Name of the analog.
- Mode- this is the type of electrical input.
- Sensitivity- how often the analog will report to server based on percentage of analog change.
- Units- Engineering units.
- Gallons/Inch- this is the value the user enters that represents the number of gallons in one inch or one foot of liquid in this well or tank repectivley.
- Low- The setpoint for low alarm trigger.
- High- the setpoint for high alarm trigger.
- Max- engineering units at 20 ma.
- Alarm Delay- this is the amount of time in seconds entered by the user that the alarm will have to be active to trigger and actual alarm. *Example: If the high level alarm setpoint is reached or exceeded that alarm will not be actually triggered and sent until the Alarm Delay value times out.*

# DEVICE SETUP

## DIGITAL INPUT CONFIGURATION

Digital Sensor Config

Show/Hide

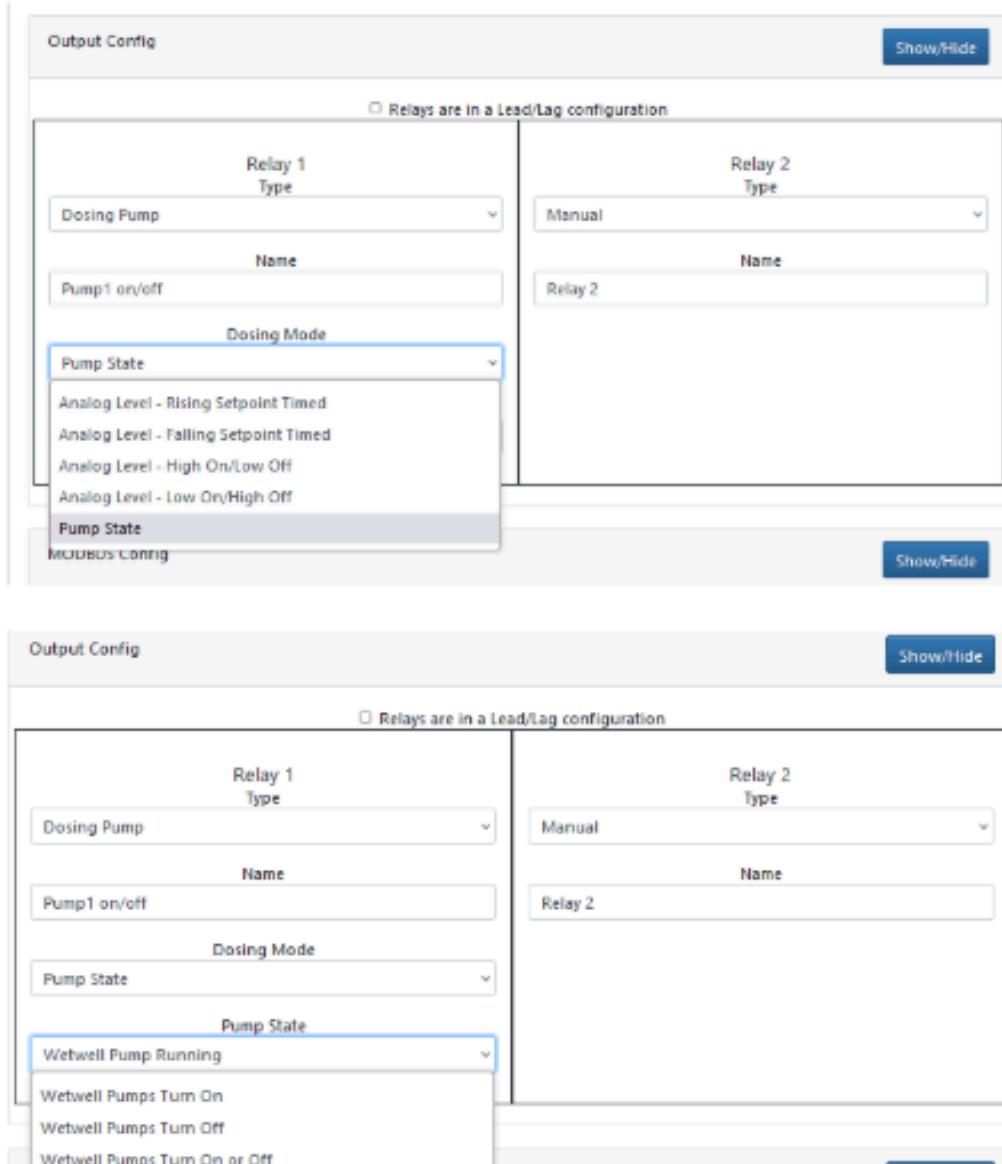
<p><b>Digital 1</b> Type</p> <p>Wetwell Pump State</p> <p>Name</p> <p>Pump 1 Status</p> <p>Input State</p> <p>Active When Closed</p> <p>Start Count Alarm 0</p> <p>Runtime Alarm (min) 0</p> <p>Gallons Per Cycle 1000</p>	<p><b>Digital 2</b> Type</p> <p>Wetwell Pump State</p> <p>Name</p> <p>Pump 2 Status</p> <p>Input State</p> <p>Active When Closed</p> <p>Start Count Alarm 0</p> <p>Runtime Alarm (min) 0</p> <p>Gallons Per Cycle 1000</p>
<p><b>Digital 3</b> Type</p> <p>Float Sensor</p> <p>Name</p> <p>High Float</p> <p>Input State</p> <p>Active When Closed</p>	<p><b>Digital 4</b> Type</p> <p>Alarm</p> <p>Name</p> <p>Pump 1 Fail</p> <p>Input State</p> <p>Active When Closed</p>

### Pump Alarm Config:

- Type- Type of digital being monitored e.g. Wetwell Pump, Float Sensor, Alarm, etc.
- Name- Name of the digital.
- Input State- Select whether the digital that is being monitored is active open or closed.
- Start Count Alarm- Enter the number of pump starts that when exceeded in 24 hrs will trigger an alarm.
- Runtime Alarm-Enter the number of runtime minutes that when exceeded in 24 hrs will trigger an alarm.

# DEVICE SETUP

## DIGITAL OUTPUT CONFIGURATION



Output Config

Relays are in a Lead/Lag configuration

Relay 1 Type	Relay 2 Type
Dosing Pump	Manual
Name	Name
Pump1 on/off	Relay 2

Dosing Mode

Pump State

- Analog Level - Rising Setpoint Timed
- Analog Level - Falling Setpoint Timed
- Analog Level - High On/Low Off
- Analog Level - Low On/High Off
- Pump State
- Modbus Config

Show/Hide

Output Config

Relays are in a Lead/Lag configuration

Relay 1 Type	Relay 2 Type
Dosing Pump	Manual
Name	Name
Pump1 on/off	Relay 2

Pump State

Wetwell Pump Running

- Wetwell Pumps Turn On
- Wetwell Pumps Turn Off
- Wetwell Pumps Turn On or Off

Show/Hide

### Digital Output Config:

- Type- There are two types of digital outputs. Dosing Pump and Manual.
- Dosing Pump- This selection allows you to control a digital output based on a choice of settings.
- Manual- This selection allows you to turn on and off the digital output manually with a button.
- Name- Name of the digital output.
- Dosing Mode- Select what type of digital input will control the Relay output.
- Wetwell Pumps Turn On.
- Wet well Level-Timed- the output will go on based on level set points. The output will come on for the amount of time set by the user in Dose Runtime box.
- Wet well- High on/Low Off- This selection will control the output based on a high and low setpoint. The output will go on when the high setpoint is reached and off when the low setpoint is reached.

# DEVICE SETUP

## DIGITAL OUTPUT CONFIGURATION 2

The image displays three separate screenshots of a digital output configuration interface, likely from a software application. Each screenshot shows a configuration panel for 'Relay 1'.

- Screenshot 1:** Shows the 'Dosing Mode' dropdown set to 'Wetwell Level - Low On/High Off'. The 'Setpoints' section shows a low setpoint of 25% and a high setpoint of 50%.
- Screenshot 2:** Shows the 'Dosing Mode' dropdown set to 'Pump State'. The 'Pump State' dropdown is expanded, showing options: 'Wetwell Pumps Turn Off', 'Wetwell Pumps Turn On', 'Wetwell Pump Turn Off' (which is highlighted with a blue selection bar), 'Wetwell Pumps Turn On or Off', and 'Wetwell Pump Running'.
- Screenshot 3:** Shows the 'Dosing Mode' dropdown set to 'Pump State'. The 'Pump State' dropdown is expanded, showing the option 'Wetwell Pumps Turn On or Off'. Below this, a 'Dose Runtime (seconds)' input field is set to 60.

### Digital Output Config

- Wet well- Low on/High Off- This selection will control the output based on a high and low setpoint. The output will go on when the low setpoint is reached and off when the high setpoint is reached.
- Pump State- This selection will control the output based on the condition of the existing wet well pump.
- Dose Runtime- this setting will dictate how long the output will stay on after the appropriate condition is met in the pump state setting.