ArrrrPWS

Overall System Block Diagram - (c)2020 by Gregory Allen Sanders. GPL v3.0

Wind Speed Sensor

Temp Pressure Humidity Sensor

Rain Sensor

Tipping Bucket Rain Rate Sensor

ADC Module (analog to digital)

Wind Direction Sensor

DROK DC to DC Buck Converter 12V to 5V

Raspberry Pi

System Ventilation Fan (4-wire)

Weather Station

External Supporting Hardware

Lightning Arrestor

Ground Rod

WiFi

Wireless Router

Lightning Arrestor

AC to DC power supply with 12V-4ah battery backup and remote controlled relay

PC running Ubuntu, mySQL, nginx, Python3

PC running Ubuntu, Zoneminder

120VAC outlet

Ground Rod

Raspberry Pi conveniently nearby for Pool Controls. Used relay to trigger RC Relay in pwr supply.