Transmitter side

1. Controller: Arduino pro mini

https://store.arduino.cc/usa/arduino-pro-mini

To flash(requires one Arduino nano):
- Connect GND VCC TX0 RST of Pro mini with a Nano
- Short RST and GND of the Nano
- Select device Arduino pro/pro mini 5v 16MHz in Arduino

While uploading the code, just press the reset button of pro mini for few (~3) seconds

2. Sensors and devices: JSNSR04 Ultrasonic, LORA SX1276 based serial link WIR-1286, WiSense solar board(Vmp 10.5 max tolerant)

3. Enclosures

http://wellcontactsco.com/photogallery.html

Material: ABS (White)

Transmitter : 80X120X85 (mm)

Receiver: 80X120X55 (mm)

4.Batteries

Make: Ultralife Batteries India

Mfg: Li-Ion Rechargeable battery is with 3.7 volts 5.2 Ah capacity with built-in protection.

Part number: Transmitter side -ULIN1S2002

5. Lithium charger:

 Make: Sparkfun

 Details: Sparkfun SunnyBuddy Rev3 MPTT charger board

Receiver side

 1. **Microcontroller:** *Particle Argon*

https://docs.particle.io/datasheets/wi-fi/argon-datasheet/

To flash:

>Use particle mobile app to pair and give wifi credentials. Argon can remember last 10 devices. Repeat pairing for each credential.

Default particle account linked to tkmtank@gmail.com

>Use particle workbench or web-ide(OTA) to dump code

(Always create code backup and edit code online)

https://www.console.particle.io

 2. *Enclosures*

http://wellcontactsco.com/photogallery.html

Material: ABS (White)

Receiver: 80X120X55 (mm)

3. *OLED: SPI/I2C Adafruit ssd1306 based OLED*
   https://learn.adafruit.com/monochrome-oled-breakouts/arduino-library-and-examples

4. *Batteries*
   Make: Ultralife Batteries India
   Li-Ion Rechargeable Battery 3.7volts - 4 volts 5.2 Ah capacity with built-in protection.
   Part number: Receiver side - ULIN1S1001