2025/10/19 16:29 1/2 Technologies

# **Technologies**

This page will be filled in with technologies we come across, whether that means technologies developed from within the IEEE Smart Village ecosystem, or simply technologies commonly used within this ecosystem. This is to provide useful resources to existing and future teams either exploring improvements to their current technologies, or looking for gaps in the industry that may need solving through startups and other innovative approaches.

### Generation

#### **Solar Photovoltaic**

Solar Photovoltaic (PV) is the most common Generation source chosen for Smart Village projects. With no moving parts, these systems require a small amount of maintenance, and can last for decades.

#### **Sun Blazer and PBK**

One set of Solar PV technologies developed through ISV is the Sun Blazer III and the Sun Blazer Lite, which utilize the Portable Battery Kit. Designed to fit in the back of a standard pickup truck, these systems are designed for easy transportation and deployment. In addition, they were designed to make use of regular construction materials that are widely available and low cost in many underdeveloped regions.

### **Hybrid Solar PV and Diesel Generator (DG)**

One presentation we received was from a project in India that used PV and DG for cooking Jaggery (sweetener in India). Technical diagrams will be included when presentation is uploaded.

#### **Charge Controllers**

Charge Controllers — Inclusive Energy

**Solar Thermal** 

**Wind Turbines** 

**Hydroelectric** 

#### Last update: 2024/12/20 19:29

#### **Geothermal**

# **Transmission**

# **Distribution**

# **System Monitoring**

Check out our Smart Meter Case Study

Victron

**New Sun Road** 

Schneider (Wiser Energy)

SteamaCo

Iinco

GroWatts

Studer

Deye

Solarman

**Fronius** 

### **Data Flow Options**

### **MQTT**

Solarman MQTT: https://github.com/mpepping/solarman-mqtt

From:

http://34.125.138.210/ - IEEE Smart Village Wiki

Permanent link:

http://34.125.138.210/home:technologies?rev=1734722969

Last update: 2024/12/20 19:29



http://34.125.138.210/ Printed on 2025/10/19 16:29