

power up!

Documentation

Welcome to the Ultimate Power Management Asset!

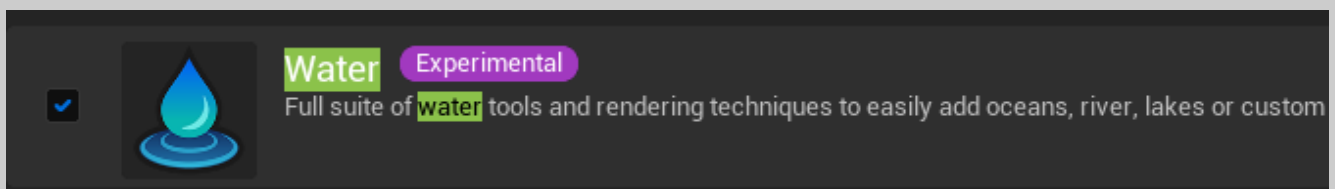
This documentation will guide you through the core features, functionalities, and customization options. Let's dive into the exciting possibilities this asset offers!

INTRODUCTION

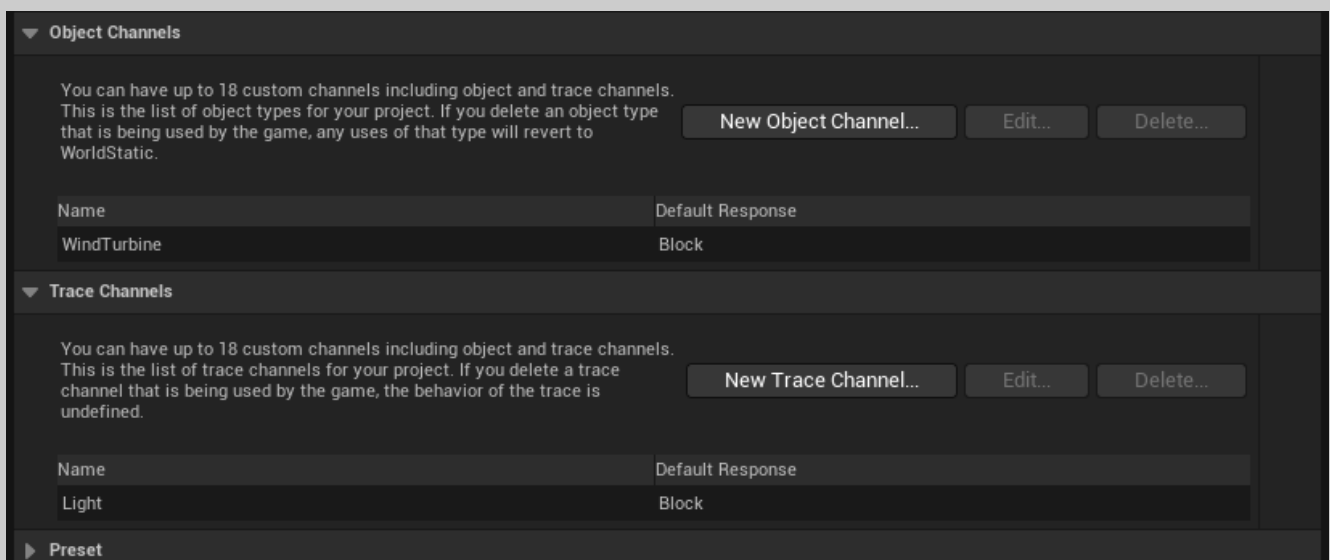
Thank you for selecting our power management asset for your project. This asset provides a comprehensive suite of power sources, storage, and consumers to help you create a dynamic energy system. By the end of this guide, you'll be equipped to harness its full potential. If you have any questions, feel free to reach out!

Setup

- **Plugins**



- **Collision Channels:**



WHAT'S INCLUDED?

Power Sources

- **Wind Turbine:** Adjusts power output based on space and obstacles around it. Energy is calculated using factors like blade size, wind speed, and orientation.
- **Solar Panel:** Generates power based on the sun's angle and incidence.
- **Watermill:** Requires proximity to water for power generation.
- **Power Generator:** A reliable, straightforward power source.
- **Geothermal Power Plant:** Must be placed over a geyser to generate energy.

Energy Storage

- **Various storage units** with different capacities and interaction methods with power sources.

Power Consumers

- **Heater & Air Conditioner:** Modify the surrounding environment's temperature.
- **Lamp Post:** Provides illumination.
- **Central Hub Unit:** Controls and monitors energy devices within its radius, offering remote management.
- **Turret:** Aims at nearby targets and shoots if they get too close.

Connection Types

- Devices can be connected via **cables**, with **specific cables for certain devices**.
- **Advanced wireless connections** create flexible energy networks.

Upgrade Modules

- **Customizable Modules:** Modify device functionality, efficiency, and interactions. Modules include:
 - Bypass sun angle requirements for solar panels and other behaviours.
 - Increase energy production or storage.
 - Enhanced control and statistical insights.
 - Increase energy consumer radius and behaviours.
 - Many many more modules.

Overheating & Overloading

- **Devices may overheat or become overloaded**, affecting performance and durability.
- Use **certain devices to change the surrounding temperature** and watch out for your cable management.

Scanner

- **Monitors devices remotely**, detecting defects, monitoring temperature and load, and showing connected devices and more.
- **Includes upgrade modules** to extend range, reduce energy consumption, and much more.

Repair Mini-Game

- Adds gameplay diversity with a **skill-check mini-game for repairing devices**.

+Customization & Modularity:

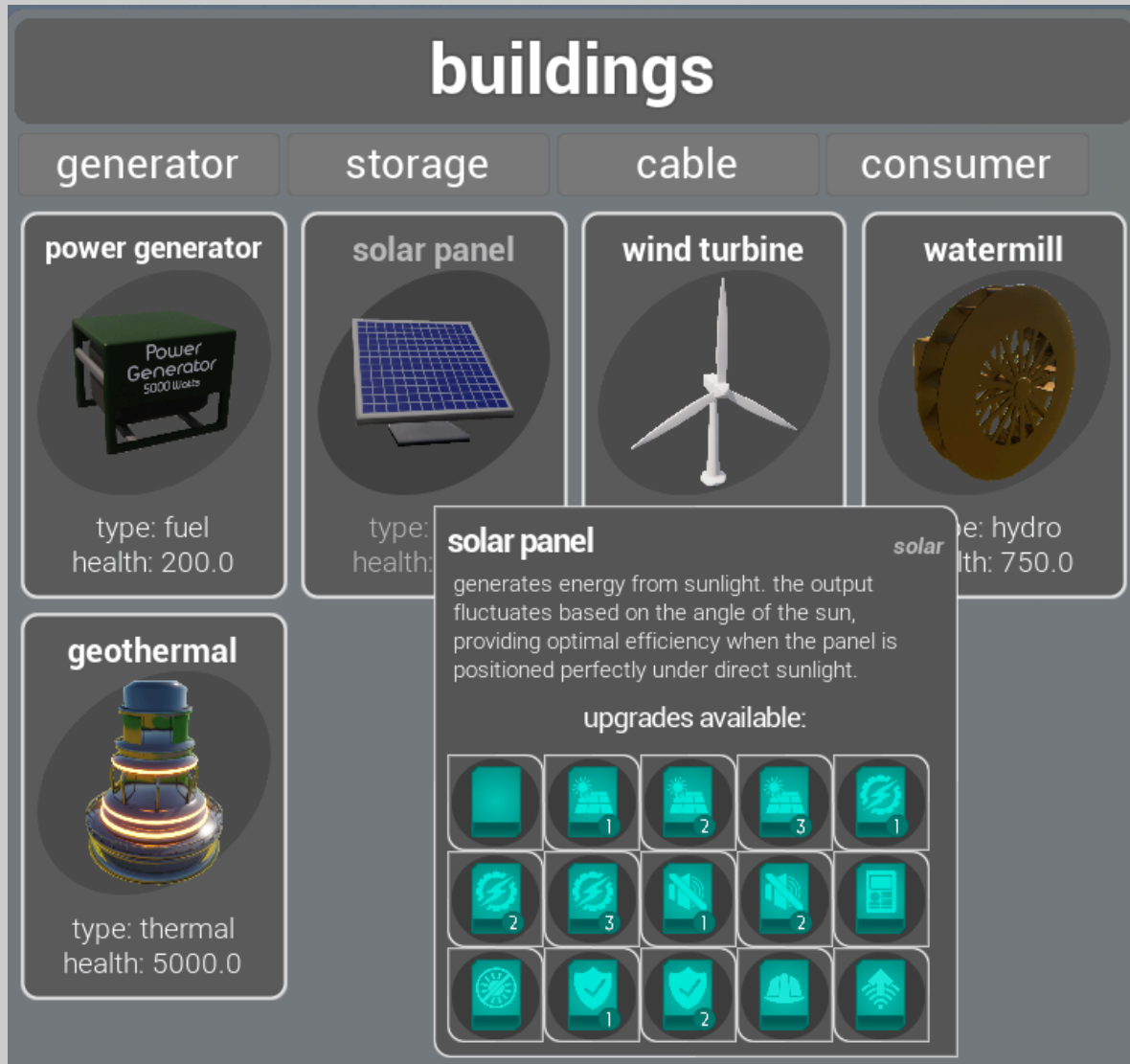
- Every device is **modular and customizable**, allowing for easy expansion.
- **Quickly add more devices**, modify their behaviours, and integrate them into the energy system.

MULTIPLAYER REPLICATION

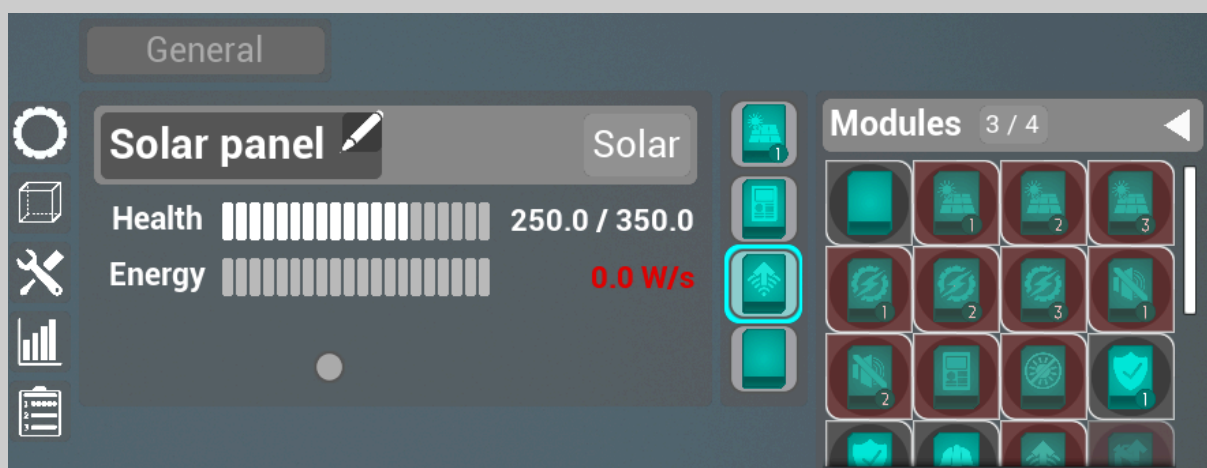
- This asset is multiplayer replicated! Synchronises device and power network interactions across players in real-time, allowing cooperative work and management.

UI / WIDGETS

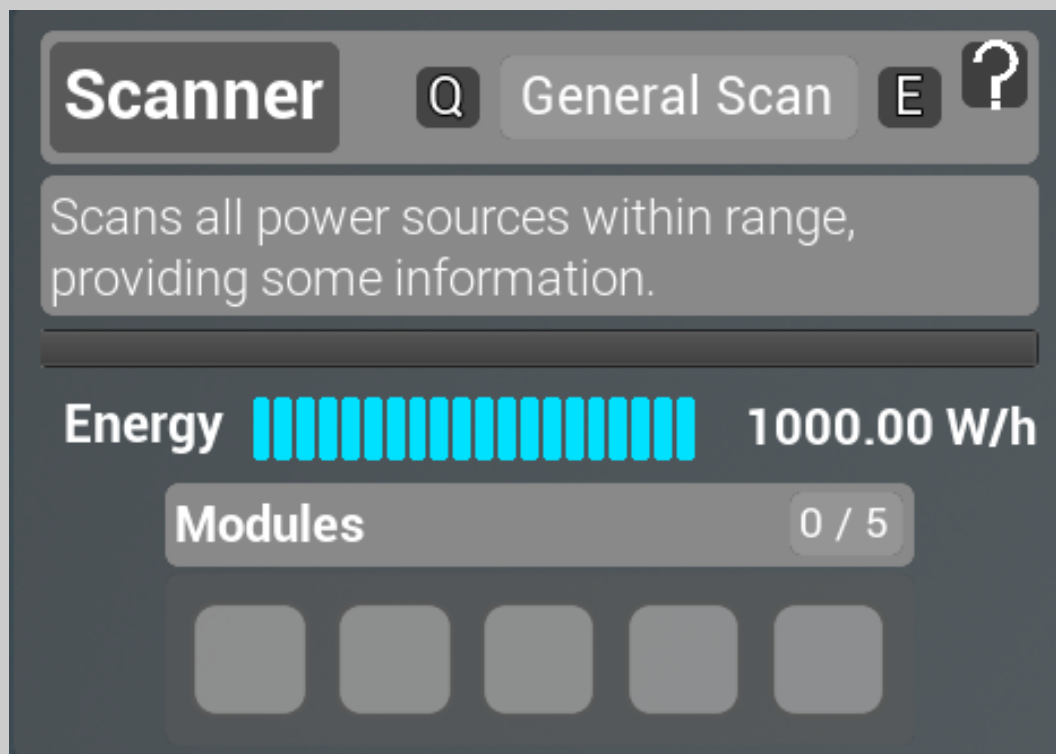
Building UI



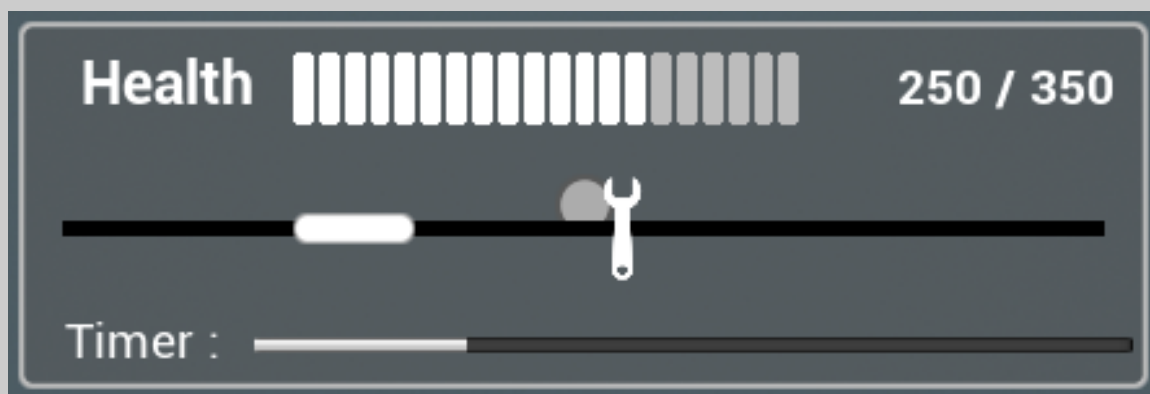
Devices Overlay UI



Scanner Overlay UI



Repair mini-game UI



Adding New Devices

Creating a device

Navigate to the Devices Folder:

- Go to [Content/PowerUp/Datatables](#).

Configure Devices Properties:

- **Open the device Data Table:** Navigate to the [DT_PowerSource](#) data table.
- **Add a New Row (or copy another row):** Create a new row for your device.
- **Fill Properties:** Set properties like [Name](#), [Mesh](#), [Thumbnail](#), [Description](#) and any specific stats like performance/energy details (check included items if needed).
- **Save Changes:** Save the data table to apply changes.

Create a New Device:

- Right-click [BP_MasterPower](#) and select [Create Child Blueprint Class](#).
- Name your new item (e.g., [BP_SolarPanel](#)).
- Open it up, select [AC_PowerSource](#) and set the newly added row on [Data Table Row](#).

Adding New Upgrade Modules

Creating an upgrade module

Navigate to the Upgrade Modules Folder:

- Go to [Content/PowerUp/Datatables](#).

Configure Upgrade Modules Properties:

- **Open the upgrade module Data Table:** Navigate to the [DT_UpgradeModules](#) data table.
- **Add a New Row (or copy another row):** Create a new row for your upgrade module.
- **Fill Properties:** Set properties like [ModuleName](#), [ModuleCategory](#), [ModuleTexture](#), [ModuleDescription](#) and any specific stats like upgrade type and upgrade value (check included items if needed). Set the desired sources to access that upgrade module using [UpgradableSources](#).
- **Save Changes:** Save the data table to apply changes.