

# Hybrid Solar and Diesel Power System

This integrated system combines photovoltaic solar panels and a diesel generator. It optimizes energy usage by using solar power first and switching to the diesel generator when solar energy is insufficient.



## Overview

### Hybrid Energy Efficiency

This hybrid system integrates photovoltaic solar panels and diesel generator technology to provide reliable power for communication base stations. By prioritizing solar energy and intelligent battery storage, the system minimizes fuel consumption and optimizes operational costs. It is specifically engineered to ensure continuous, high-performance power supply in both grid-connected and off-grid remote environments.

## Performance

### Supported Load Range

**1.5 kW**

Minimum Load

**6 kW**

Maximum Load

## System Configuration

### Key Components

- Photovoltaic (PV) solar panels
- Battery energy storage pack
- Diesel generator set
- Intelligent control unit
- Soundproof genset enclosure

### Operating Modes

PV + Grid Hybrid, PV + Diesel Genset Hybrid

## Technical Features

### Key Benefits

Intelligent Power Prioritization • Reduced Fuel Consumption • Grid-Independent Operation • Optimized Battery Storage • Noise Reduction Enclosure