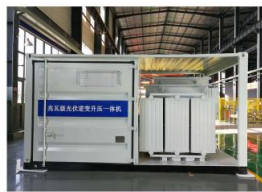


# Box-Type Prefabricated Substation

This box-type substation improves power supply quality, reduces power loss, and enhances reliability, which is important for distribution network modification. The photovoltaic prefabricated substation has a high degree of integration to meet the DC inverter, AC boost, grid connection, and data monitoring requirements.



## ADDITIONAL IMAGES



## Overview

### Integrated Power Solution

This box-type prefabricated substation is a compact and complete power distribution solution that integrates high-voltage switchgear, distribution transformers, and low-voltage switchgear into a single, weatherproof enclosure. Designed for efficient voltage transformation, metering, and compensation, it offers a reduced footprint and simplified installation compared to traditional substations. These units are ideal for urban and rural power grids, industrial parks, and commercial centers requiring reliable, high-performance power distribution.

## Key Performance Metrics

### Core Specifications

**60 dB**

Noise Level

**25 years**

Design Life

### Cooling System

Forced cooling

## Photovoltaic Technical Parameters

### System Parameters

Parameter	Value
Max Array Voltage	1000V DC
MPPT Range	500-850V
Rated Grid Frequency	50Hz
Grid Freq. Range	47.5-51.5Hz

### Model Variants

- ZGYB-12/500(630)kVA
- ZGYB-12/1000(1250)kVA
- ZGYB-12/1800(2000)kVA

## Communication & Protection

### HV Protection Methods

- Method 1: Load switch + Fuse
- Method 2: Fuse + Microcomputer protection

### Communication Interfaces

Optical fiber ring network, Ethernet, GPRS (Optional), 4G (Optional)