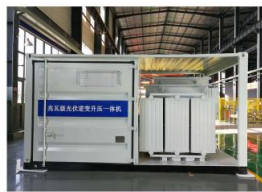


Box-Type Prefabricated Substation

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)