


# Microgrid System Solution




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Efficient

Green

Energy Saving

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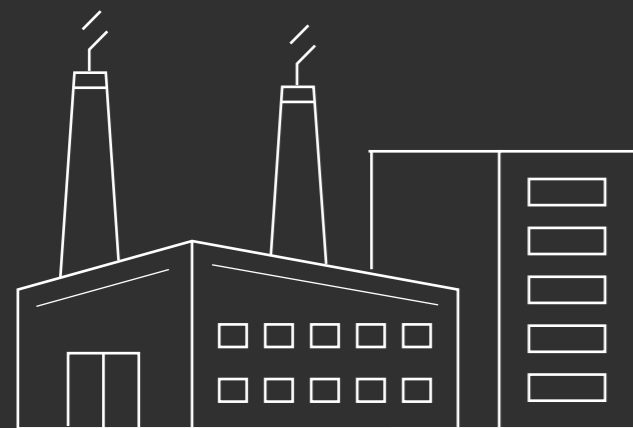
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# ABOUT JNTECH

JNTECH is a global leader in advanced micro-grid solutions, committed to providing reliable and sustainable energy systems that address the unique challenges of diverse regions worldwide. Since our founding in 2006, we have focused on providing stable, affordable, and sustainable power through green energy for more people. To achieve this, we have developed a diverse portfolio of solutions that can adapt to different markets and needs. Currently, our products are sold in over 100 countries and regions.

As a leading manufacturer and provider of solar and new energy products, JNTECH specializes in innovative technologies to meet a wide range of energy requirements. Our solutions include home energy storage systems, solar water pumping systems, solar oil extraction systems, solar mining systems, solar irrigation systems, electric vehicle charging systems, and other micro-grid solutions. These solutions incorporate both our proprietary products and those from other providers, ensuring comprehensive support for agriculture, remote power, and carbon footprint reduction.

With extensive experience and technical expertise in photovoltaic micro-grid projects, JNTECH has established strong partnerships with organizations such as the World Bank, United Nations, IBRD, FAO, and various NGOs. These collaborations underscore our commitment to advancing sustainable energy solutions on a global scale. We believe that the widespread adoption of clean energy will enhance convenience and development opportunities for communities worldwide.



## Qualifications and Honors

- ▶ National Standard Drafter
- ▶ United Nation Global Marketplace Supplier
- ▶ Specialized and New Enterprise
- ▶ National High-Tech Enterprise
- ▶ National Innovative SME
- ▶ Anhui Province Specialized in Special New Enterprises
- ▶ CE, TUV, ISO9001, ISO14001, and OHSAS18001 Certifications

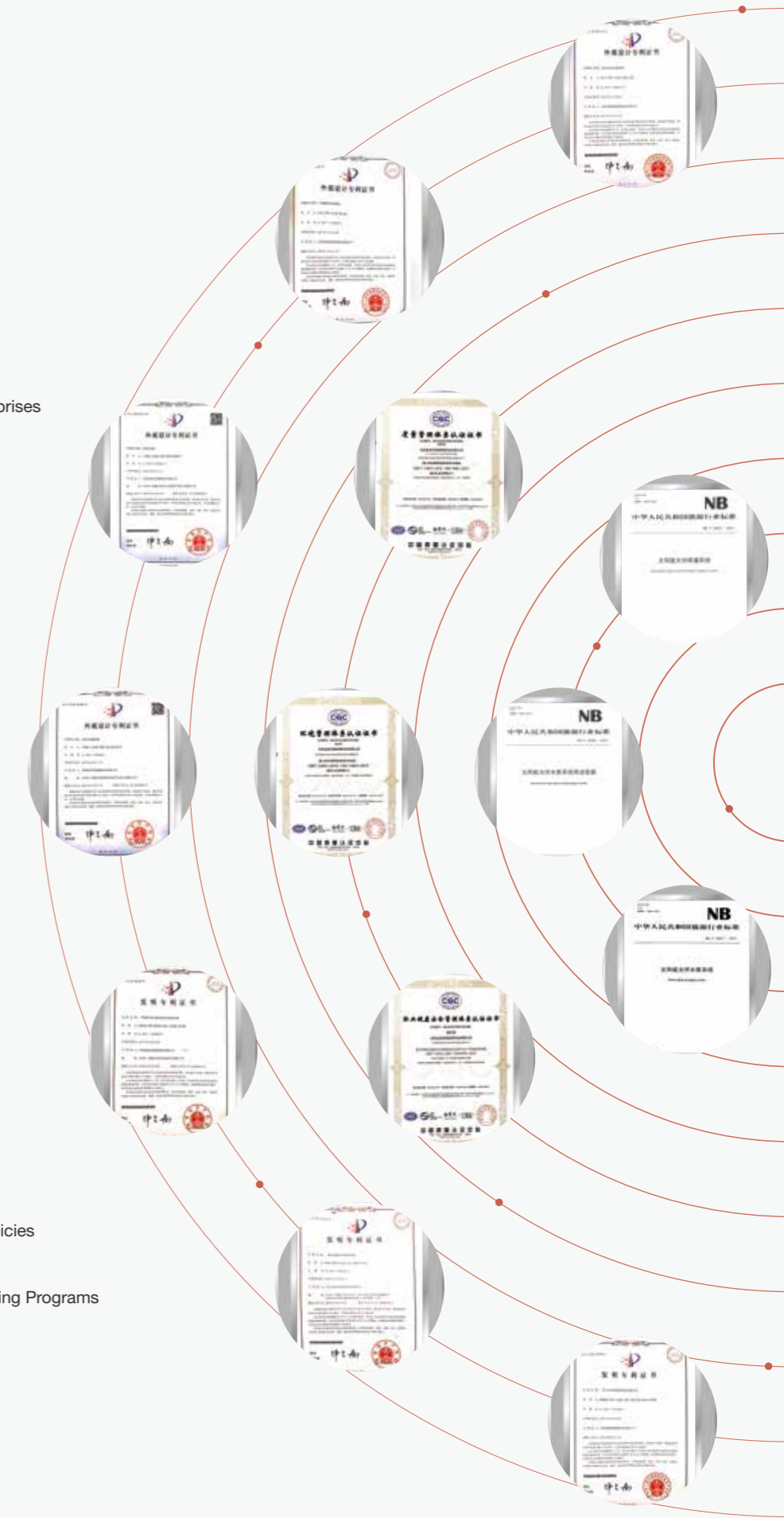
## Service

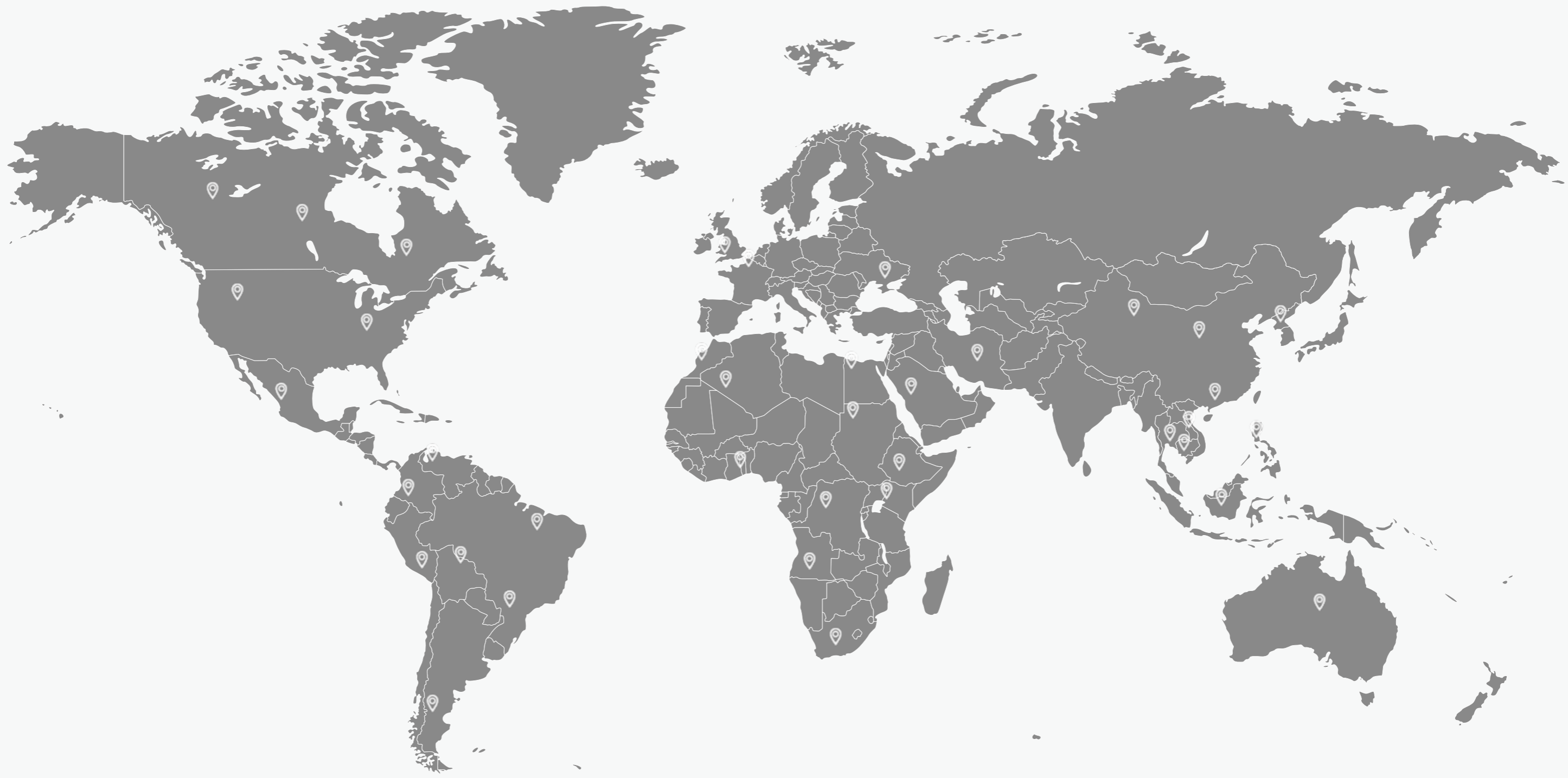
### Pre-sales

- ▶ Investment Consultation
- ▶ Site Selection Assistance
- ▶ Customized Design Solutions
- ▶ Site Construction Support
- ▶ Operations and Maintenance Planning

### After-sales

- ▶ Standardization of Workflow, Operations, and Policies
- ▶ Technical Services, Marketing Support, and Training Programs
- ▶ Collaborative Platform for Technical Exchanges
- ▶ Creating Value through Win-Win Cooperation
- ▶ 24/7 Online Support and Service





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## GLOBAL SALES NETWORK

**15+**

Years of Experience  
in Solar Industry

**40%+**

R&D Employees

**100+**

Countries and Regions

**10,000+**

Global Clients

**1,000,000+**

Products Sold

# MICROGRID SYSTEM



## Microgrid Overview

JNTech's Microgrid System is an advanced, integrated energy solution designed to provide reliable, sustainable, and independent power for areas with limited or unreliable access to the traditional grid. Our microgrid systems combine different energy sources such as solar energy, wind power, diesel generator with advanced energy storage technologies to create a self-sufficient power network, capable of delivering electricity to residential, commercial, and industrial applications.

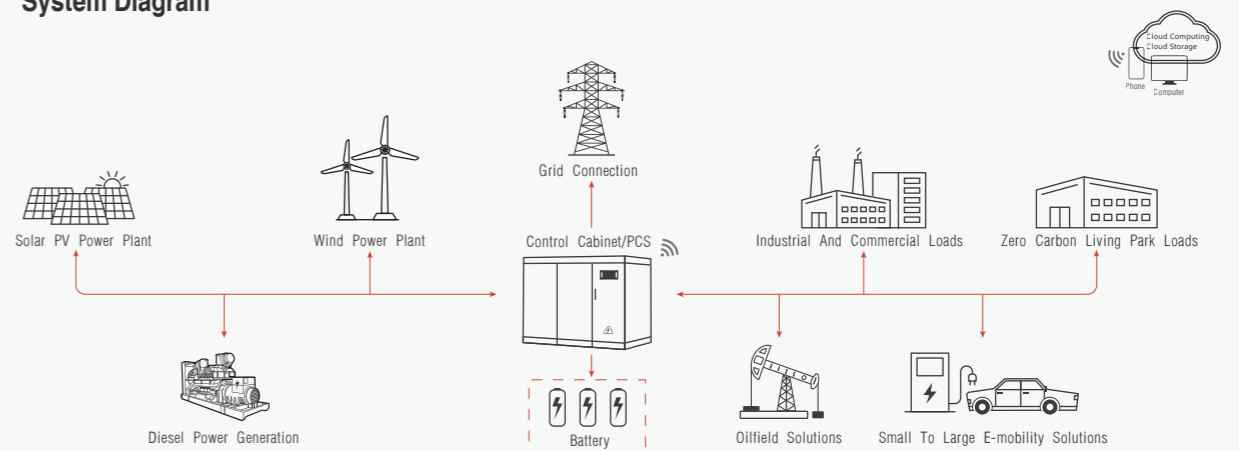
The system operates efficiently in both off-grid and hybrid configurations, offering flexibility in its deployment. It integrates seamlessly with existing grid infrastructure, ensuring continuous power supply during peak demand or when grid power is unavailable. By leveraging our cutting-edge energy management system, users can optimize energy consumption, reduce costs, and minimize their environmental impact.

### Key Features:

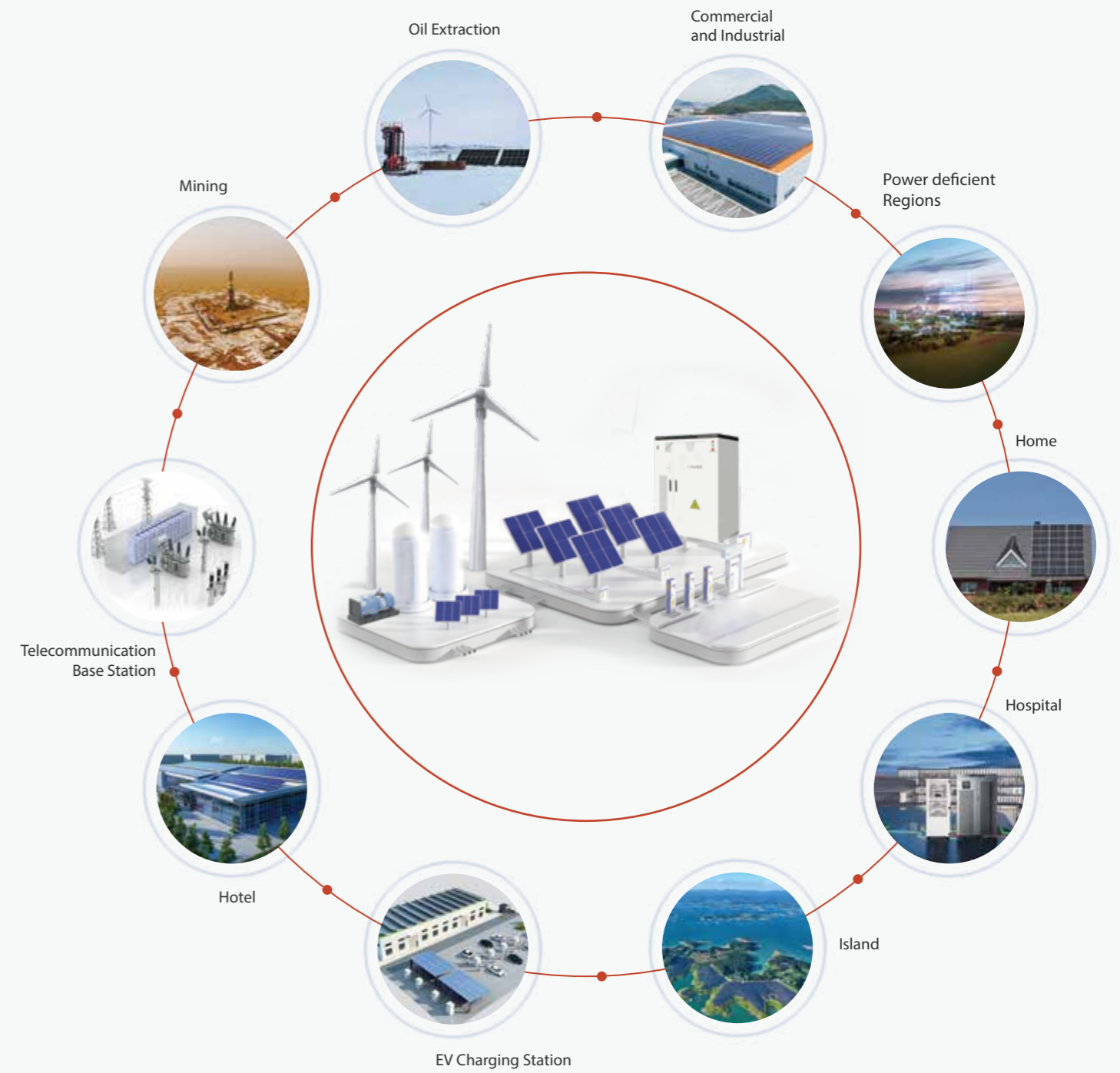
- Renewable Integration:**  
 Utilizes solar and other renewable sources, reducing reliance on traditional fossil fuels.
- Energy Storage:**  
 Equipped with high-capacity batteries, ensuring a stable power supply even during periods of low sunlight or at night.
- Modular Design:**  
 Scalable system architecture that can be customized to meet specific energy needs, from small communities to large industrial sites.
- Remote Monitoring and Control:**  
 Advanced energy management software allows for real-time monitoring and remote control, ensuring operational efficiency and ease of maintenance.
- Sustainable and Reliable:**  
 Ideal for applications in rural areas, disaster recovery zones, or regions with unstable grid connections, providing continuous, eco-friendly energy.

With over 15 years of expertise and a global presence in more than 100 countries and regions, JNTech's microgrid systems have been designed and tested to meet the highest standards of quality and performance, ensuring long-term reliability and cost-effectiveness for our customers.

### System Diagram



# SOLUTIONS



Microgrid Solutions

## 1. Microgrid System for Mining

The JNTech Mining Microgrid System provides an efficient and cost-effective energy solution for mining operations in remote or off-grid areas. By integrating solar energy with advanced storage systems, the microgrid ensures a stable power supply, reducing the need for expensive fuel-based generators. This system allows mining companies to operate efficiently in isolated locations, minimizing energy costs and environmental impact.

### Key Benefits:

- Significant cost savings with reduced fuel consumption
- Easy deployment for mining operations in off-grid areas
- Stable, continuous power supply for critical equipment
- Reliable power supply for 24/7 mining operations
- Reduced fuel consumption and emissions
- Easy to scale for large mining projects



## 2. Microgrid System for Oil Extraction

The JNTech Oil Extraction Microgrid System offers a sustainable energy solution for oil extraction sites. Combining solar energy with storage, this system reduces reliance on traditional fossil fuels and minimizes operational costs. It is designed to handle the high energy demands of oil extraction equipment, ensuring continuous power in off-grid or unstable grid areas, while promoting a greener and more efficient oil extraction process.

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### Key Benefits:

- Reliable energy for oil extraction in off-grid areas
- Stable energy supply for uninterrupted extraction operations
- Lower operational costs with reduced fuel dependency
- Environmentally friendly alternative to traditional power sources



### 3. Microgrid System for Island

The JNTech Island Microgrid System provides a sustainable energy solution for island communities, where access to traditional energy grids is often limited. Utilizing solar power and energy storage technologies, the system can power homes, businesses, and critical infrastructure. Its scalable design allows for easy adaptation to the specific needs of islands, ensuring energy independence, reducing fuel imports, and enhancing resilience against natural disasters.

#### Key Benefits:

- Energy independence for island communities
- Stable electricity supply for island infrastructures
- Lower grid expansion costs and enhanced energy sustainability
- Reduced reliance on imported fuels
- Facilitates island tourism development with reliable power
- Resilient power supply during extreme weather events

## 4. Microgrid System for Commercial and Industrial

The JNTech Commercial and Industrial Microgrid System is designed to meet the energy demands of large-scale commercial and industrial operations. By combining solar power with energy storage, the system ensures uninterrupted power supply, optimizes energy usage, and significantly reduces operational costs. It offers a scalable solution for manufacturing plants, warehouses, and business complexes, contributing to both cost-efficiency and environmental sustainability.

### Key Benefits:

- Stable power supply for critical business operations
- Reduced energy costs and carbon footprint
- Customizable to meet specific energy needs



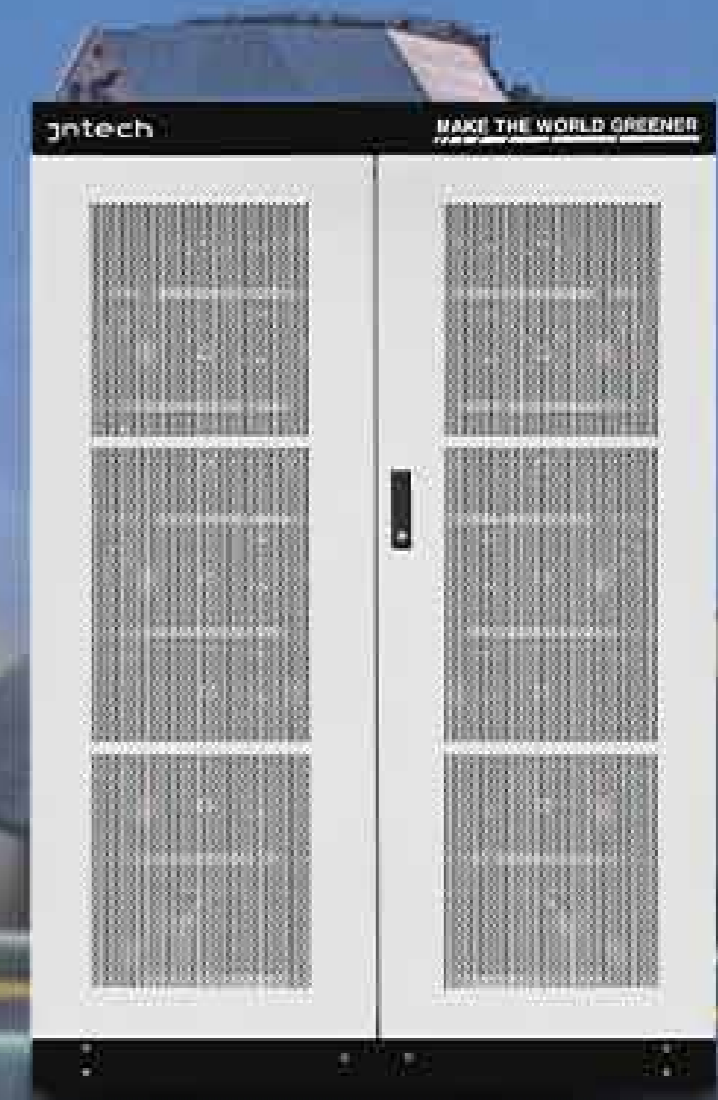
## 5. Microgrid System for Hospital

The JNTech Hospital Microgrid System delivers a reliable and uninterrupted power supply critical to healthcare facilities. Combining solar energy with battery storage, the system ensures continuous power for life-saving equipment, lighting, and temperature

control systems, even during grid outages. It reduces operational costs and enhances energy resilience, ensuring that healthcare services are never compromised, particularly in remote or disaster-prone areas.

### Key Benefits:

- Uninterrupted power for critical healthcare operations
- Energy resilience during emergencies or power outages
- Lower operational costs and reduced environmental impact



## 6. Microgrid System for Hotel

The JNTech Hotel Microgrid System is a sustainable energy solution for the hospitality industry. By integrating solar energy and storage, hotels can reduce their energy costs, provide uninterrupted guest services, and enhance their environmental sustainability efforts. The system ensures reliable power for lighting, heating, air conditioning, and other essential hotel operations, making it an ideal choice for eco-conscious hotel brands.

### Key Benefits:

- Reduced energy costs and increased sustainability
- Reliable power for seamless guest experiences
- Enhanced brand reputation through green energy use

## 7. Microgrid System for Power-deficient Regions

The JNTech Power-deficient Regions Microgrid System is designed to provide electricity to remote or off-grid communities with limited access to traditional energy infrastructure. By harnessing solar power and combining it with energy storage, the system enables continuous, reliable power supply for households, schools, and local businesses, improving the quality of life and promoting local economic development.

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### Key Benefits:

- Access to clean, reliable energy in remote areas
- Improved quality of life and economic opportunities
- Scalable solution for expanding community energy needs



## 8. Microgrid System for Home

The JNTech Home Microgrid System is a state-of-the-art residential energy solution, combining solar panels with battery storage to provide reliable, sustainable power for homes. It reduces dependency on the grid, lowers electricity bills, and ensures backup power during outages. This system is perfect for homeowners looking to embrace renewable energy while securing energy independence.

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### Key Benefits:

- Lower electricity costs with solar power
- Backup power during grid outages
- Environmentally friendly energy solution for homes



# PRODUCTS

Industrial and commercial energy storage cabinet

30kW/30kWh-  
100kW/200kWh



Liquid cooling energy storage cabinet

215kWh



Container Energy Storage System

Maximum 5MWh



Energy storage battery cabinet

30kWh - 1000kWh



Energy Storage Inverter PCS Module

50kW - 125kW



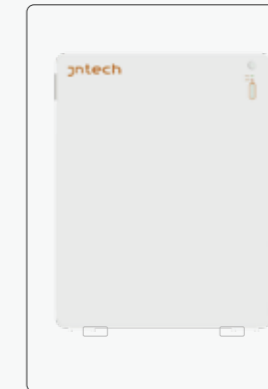
Off-grid switching STS module

300kW



JNB025100-W

2.56kWh Lithium Battery



JNB051100-W

5.12 kWh Lithium Battery



JNB51280-P

14.3kWh Lithium Battery  
(Mobile Design)



JNS6KLV

6 kW Hybrid Inverter



JNF3KHF-X-V1

3 kW Off-Grid Inverter



JNF5KHF-X-V1

5 kW Off-Grid Inverter

# PROJECTS

Microgrid System for Oil Extraction in Xinjiang, China



Microgrid System for Telecommunication Base Station in Qinghai, China



Microgrid System for Remote Area in Democratic Republic of the Congo

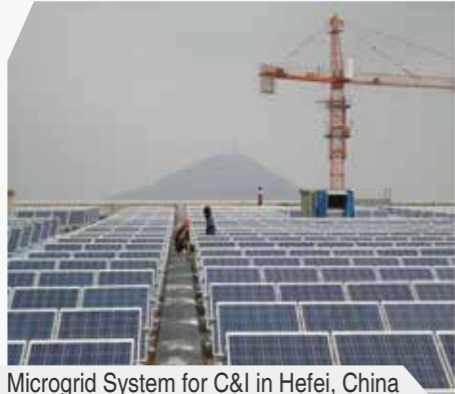


Microgrid System for Oil Extraction in Xinjiang, China





Microgrid System Solution



Microgrid System for C&I in Hefei, China



Microgrid System for Solar Pumping System in Zimbabwe



5 kWh Residential Energy Storage System in Anhui, China



Microgrid System for EV Charging Station in Anhui, China



6\*5kWh Residential Energy Storage System in Philippines



Microgrid System for EV Charging Station in Las Vegas, United States (Under Construction)



5 kW Off-Grid Solar System in Cambodia

Microgrid System Solution



22kW Solar & Utility Grid Hybrid Solar Pump System in Pakistan



45kW Solar Pump System in Uzbekistan



7.5kW Solar Pump System in Turkey



**PARTNERS**

