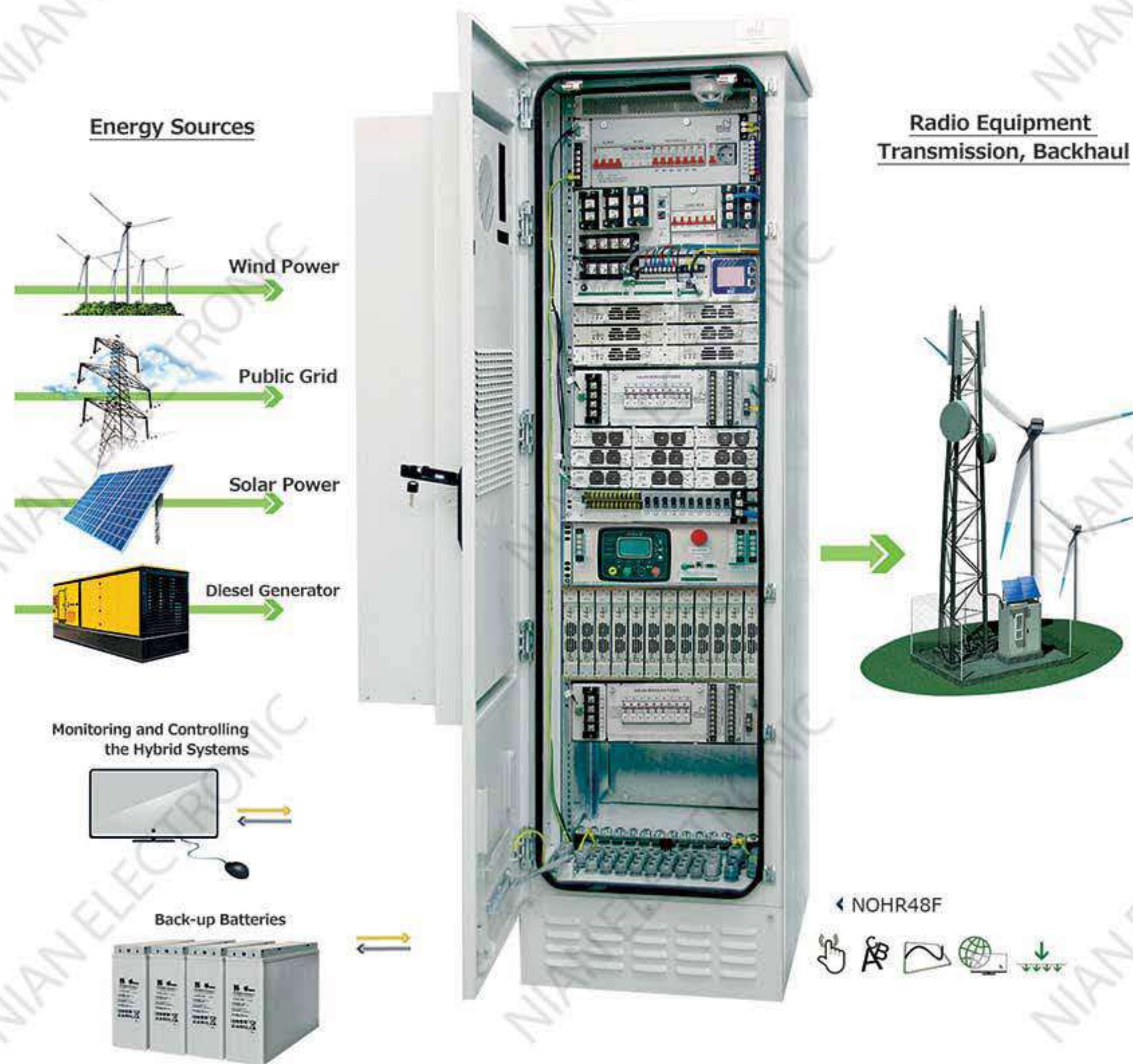


Hybrid Power System
Equipped with Monitoring Systems & Remote Control
Intelligent Energy Source Management



Features

- Fully custom design
- Reduction of D.G. operation duration and maintenance workloads
- Fully intelligent in calculating, monitoring and controlling
- Multi master system control with intelligent rectifiers and MPPT solar charger
- Shock, temperature, humidity, water, smoke sensors, door opening and cooler sensors
- GSM communication system, monitoring and control via the network under Android Application and Windows PC monitoring system software
- Intelligence in determining the priority of consumption and sources
- Save on TCO, OPEX and CAPEX expenses
- Isolated body and detachable canopy filled with polyurethane foam to reduce direct temperature impact
- Availability of control and fast charging duration

Hybrid Power System Specification

General Specification	
AC Input Model	230/380 AC 1ph & 3 Ph/45-65 Hz
Cooling System	Door Mounted/DC Air Condition/Heat Exchanger/Free Cooling
Heater	Available
Security	Lockable, Vandal-Proof Hinges, Multi-Point Locking Mechanism Door
Telecommunications Cabinet	19" for Telecom. Equipments - 12U Free Space
Firefighting System	Available
IP Compliance	55
Cabling Mode	Bottom Access - Different Sizes in Cable Glands/IP65
AC/DC Distribution	Available/MCB/MCCB/Battery Branches
Roof	Canopy/10° Ramp/Isolated with polyurethane Foam
SPD	Available/According to Site Conditions
PMU	Internet and Ethernet Access, Supported by SNMP, HTTP, Modbus TCP/IP- GSM & GPRS
Rectifier (Hot-Pluggable)	NCR48U Efficiency > 94 % (up to 96%)
Number of Rectifiers	3,6 and 9 of 3KW Rectifiers/Up to 27KW
Inverter System	Available/Outlet 220 VAC
MPPT Solar Charger (Hot-Pluggable)	Efficiency > 96% Power Capacity 1.5KW Input: 60~150VDC/Output: 48VDC
Solar Panel	Mono/Poly
Number of MPPT Solar Charger	9*1.5KW
Wind Converter	Available & Support
LLVD & BLVD	Available for Batteries & Load (LLVD & BLVD)
Load Sharing	Available
DC Distribution	Available (Custom Design)
Free Space for Wind Converter	Available
ATS	Available (Adjustable)
Battery	AGM, GEL
Diesel Generator	Fuel, Stop/Start, Oil, Maintenance etc. Monitoring and Control
Dimensions (HxWxD) mm	2050x600x650
Battery Cabinet Specification	
DC Breaker For Each String of Battery	Available MCB for Each Battery String
Battery Heater	Available/According to Site Ambient
Current Transducer	Available for Each String of Battery
Battery Cooling	Available/DC Air Conditioner
Detector Sensors	Cooler/Temperature/Humidity/Water

Introduction

Nian hybrid power solution is suitable for the locations where have no public grid electricity (off-grid) or on the other hand the public grid electricity is unstable and faces with electricity disconnection for several hours.

Nian outdoor hybrid system converts necessary DC power from different sources such as renewable energies (solar & wind), diesel generator, Back up batteries with stable voltage and currency.