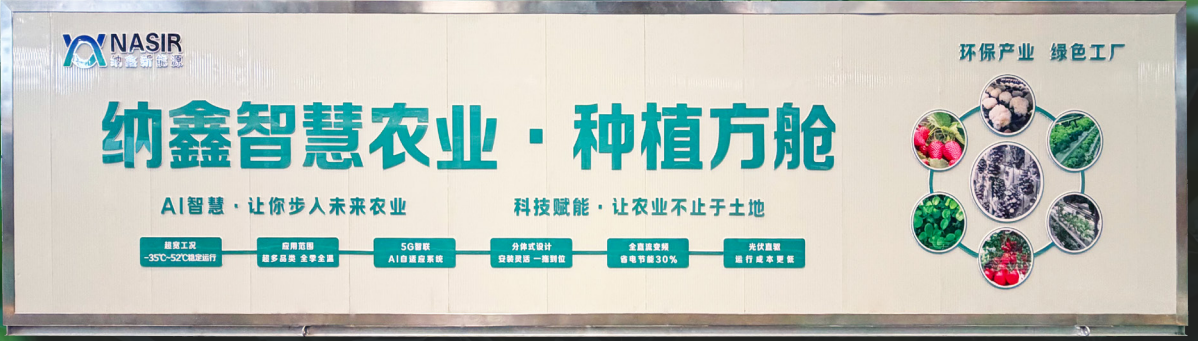




INTRODUCTION TO SMART AGRICULTURE CABIN

Product Introduction



NASIR Smart Agriculture Cabin

Smart agricultural greenhouses, as a crystallization of modern agricultural technology, focus on the artificial cultivation of various edible fungi, fruits, vegetables, and other high-efficiency, economically viable crops; their essence lies in the precise regulation of key growth conditions such as temperature, humidity, light, and CO₂. By equipping agricultural production with a "smart brain" and providing it with the wings of technology, these systems enable data to rapidly integrate as a new factor of production across all stages and aspects of agricultural production—including farming, planting, management, and marketing—thereby effectively enhancing the allocation efficiency of traditional production factors such as rural land, labor, capital, and technology, and driving agricultural production toward greater intelligence.

The Naxin Smart Agriculture Mobile Cabin utilizes heat pump technology for heating, cooling, and fresh air supply with constant temperature and humidity control, photovoltaic direct-drive energy conversion technology, and AI intelligent control technology to ensure a bountiful harvest throughout all four seasons—promoting agricultural development through technological innovation. It supports AI adaptive control, enabling automatic startup, shutdown, and adjustment of temperature, humidity, CO₂/carbon dioxide concentration, and light intensity based on specific time periods and stages; it also supports remote intelligent control to facilitate the operation of smart equipment.

The Naxin Smart Agriculture modular cabin can cultivate dozens of edible fungi, including Golden Ear mushroom, Xiuzhen mushroom, Monkey Head mushroom, button mushroom, matsutake mushroom, snowball mushroom, coral mushroom, gray tree flower, Ganoderma lucidum, and Sanghuang; it can also be used to grow high-yield economic crops such as strawberries and vegetables.

● Display of planting product types



● Product advantage

1 Complete Intelligent System (AI + IoT)



Environmental Perception IoT Layer

The chamber is densely equipped with high-precision sensors:temperature and humidity,CO₂ concentration,nutrient solution EC/PH,dissolved oxygen level,light intensity,ammonia concentration,and bacterial concentration;24-hour data collection per second Data:Automatica nomaly alarm.



CustomizedSpectralLEDIntelligentLightControl

AI-based Light Formulation System:automatically switches between red and blue light ratios across the three stages—seedling cultivation,growth,and harvesting;allows for on-demand adjustment of light intensity and illumination duration;increases photoelectric conversion efficiency by 50%,thereby improving energy efficiency and reducing energy consumption.



Fully Automatic Waterand Fertilizer Recycling System

The nutrient solution system features automatic dilution,filtration,sterilization,and reflux;it provides timed and precise dosing,enables real-time adjustment of root-zone dissolved oxygen levels,thereby preventing root rot;and supports customized nutrient solutions enriched with trace elements,selenium,or calcium.



5G Remote Central Control Platform

Dual-end control via mobile app and desktop:one-click start/stop,remote parameter modification,historical data storage and export;centralized management of multiple cabins from remote locations,with fault notification via SMS.



AI Vision Crop Recognition (High-End Version)

High-definition indoor cameras combined with image recognition algorithms: automatically identify nutrient deficiencies,mold growth,and minor plant diseases;automatically adjust water,fertilizer,temperature,and humidity levels in advance,enabling predictive maintenance without manual intervention.



Automatic Disinfectionand Air Circulation

Ultraviolet circulation sterilization and positive/negative ion airpurification;scheduled indoor air exchange to control bacterial spore concentrations,with no use of pesticides throughout the entire process.



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Automated Harvesting Assistance (Top-tier Model)

Automatic transplanting trays with a rotating planting stand that automatically lifts and lowers,reducing the need for manual harvesting small roboticarminvolvingbending.

2 High Output,Rapid Conversion



Stereoscopic planting

Multi-tier shelving system for planting offers high space utilization efficiency.



Annual stable production

Can be planted through out the year(365days),unaffected by weather conditions.



Short cycle and high number of crops

The number of cropping rotations has doubled compared to traditional methods.



High quality

Qualityrate:95%+; no pesticide residues; consistent appearance.

3 Compact Size Easy to Deploy



Compact footprint

Single warehouses typically have dimensions of 28-40m²(standard container size:12m×3m),do not occupy arable land,and can be placed on idle sites.



Portable

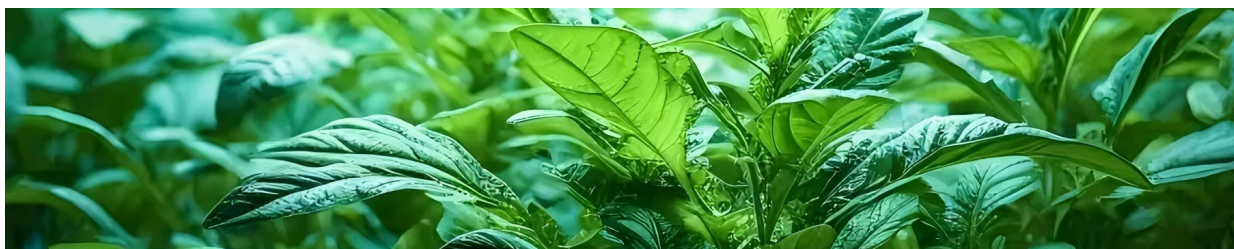
Containerized design:detachable,hoistable,relocatable; equipped with integrated water and electricity supply for immediate use,offering flexible site deployment options.



Can be clustered

Multiple interconnected modules for rapid capacity expansion

4 Green, Energy-Efficient, and Cost-Effective



Compact footprint

Prevents pests and diseases; zero pesticides, zero chemical fertilizers;safe and traceable.



Portable

Polyamide insulation combined with sealing ensures energy consumption is only 5% of that of traditional systems, while also saving water and electricity.



Can be clustered

Fully automated operation—one operator can manage over 100 cabins—significantly reducing labor costs.

5 Flexible Adaptation and Universal Compatibility With Multiple Mushroom Species



Customizable

Dimensions and configurations can be customized as needed, offering flexible adaptability.



Rapid production

Installation and commissioning take 1-3 days; microbial inoculum enters the chamber and begins producing immediately, resulting in a rapid return on investment.

● Domestic and international application scenarios for smart farming modular cabins

1 Domestic Application Scenarios



Scenario 1: Rural Revitalization - Large-Scale Production of High-Value Mushrooms and Traditional Chinese Medicinal Herbs

Application Overview

Standard container-based modular cultivation clusters enable intensive cultivation of morels, golden ear mushrooms, Sanghuang fungi, and Ganoderma lucidum; these systems are not constrained by seasonal or mountainous conditions, allowing each unit to produce continuously throughout the year.

These clusters are well-suited for county-level specialized agricultural industrial parks and entrepreneurship bases for returning migrants, with the highest number of installations located in Northwest China, Yunnan-Guizhou, and Zhejiang Province.

Application Overview

In regions with severe winter cold and poor soil conditions such as Xinjiang, Inner Mongolia, and Gannan, prefabricated greenhouses have been deployed to grow hydroponic lettuce, oil spinach, and seedling vegetables using sealed, heat-retaining systems with low water consumption, thereby addressing local vegetable shortages during winter and replacing long distance cold-chain transportation.

Scenario 2: Northwest Cold Regions / Gobi Region Vegetable Supply Chain - Hydroponic Production of Leafy Vegetables



Scenario 3: Agriculture - Supermarkets & Shopping Centers/ Hotels / Community Micro- Facilities

Application Overview

Located in urban shopping malls, high-end restaurants, office building rooftops, or as small-scale pop-up facilities within homestay cultural tourism complexes, this space offers fresh herbs and micro-collard greens, specializing in organic ready-to-eat meals while also serving as a destination for sightseeing and educational outreach.

Application Overview

Mobile artificial climate chamber capable of precisely regulating light, temperature, humidity, and CO₂; suitable for year-round multiple generation breeding of rice, vegetables, and flowers; used for experiments on crop stress resistance and cultivar selection; provides a standardized and reproducible experimental environment.

Scenario 4: Scientific Research and Breeding - University / Agricultural Research Institute - Propagation Experiment Module



Scenario 5: Special Support Services — Island Operations, Border Defense, and Remote Oceanic Scientific Research Logistics

Application Overview

Ships equipped with modular cabins aboard South China Sea islands, inland oil fields, and polar research vessels feature a sealed self-sustaining water circulation system that provides fresh vegetables to resident personnel over extended periods, thereby significantly reducing ocean transport costs and losses.

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Global Application Scenarios



Scenario 1:

Commercialized Cultivation in the Middle Eastern Deserts (Saudi Arabia, United Arab Emirates, Qatar)

Application Overview

In desert regions characterized by extreme heat, water scarcity, and limited arable land, thermal-insulated enclosed prefabricated cabins can achieve a 95% water-saving rate when used for large-scale cultivation of salad greens and herbs, enabling local hotels and supermarkets to meet their own supply needs and thereby reducing dependence on imported fruits and vegetables.

Application Overview

In high-latitude regions where winters feature permafrost and prolonged polar nights, the low-temperature insulation system of the prefabricated cabin operates stably at -35 ℃ , enabling year-round production of strawberries, leafy vegetables, and specialty berries.

Scenario 2:

Nordic and Canadian extreme cold regions - year-round fruit and vegetable production



Scenario 3:

Vertical Farming in High-Density Urban Areas of Singapore, South Korea, and Japan

Application Overview

Given the scarcity of arable land nationwide, modular prefabricated cabins can be deployed on rooftops, underground parking areas, or commercial mezzanines; government support can facilitate local production of leafy vegetables to achieve self-sufficiency and alleviate pressure on food imports.

Application Overview

European and American pharmaceutical companies utilize sealed modular chambers to standardize the cultivation of medicinal herbs, enabling precise control over the environmental conditions to stabilize active ingredients, thereby complying with pharmaceutical manufacturing quality control standards.

Scenario 4:

Standardized Cultivation of Medicinal Plants by Overseas Pharmaceutical Companies



Scenario 5:

Logistics Support for Overseas Mining Areas and Military Bases

Application Overview

Modular prefabricated shelters transported via containerized shipping and capable of rapid deployment are being deployed to mining areas in Australia and Africa, as well as NATO overseas military bases, to continuously supply fresh vegetables to remote locations.

● Eight Key Advantages in Supporting Rural Revitalization





Revitalization of Idle Land:

Make full use of idle land, abandoned factory buildings, and underutilized greenhouses to improve the utilization rate of land resources.



Boost the Economic Development:

Promoting robust agricultural development, driving local economic growth, and fostering industrial prosperity.



Diversification of Agricultural Products:

Expand the variety and quantity of agricultural products, enhance their added value, and promote industrial diversification in rural areas.



Environmental Protection and Coordinated Development:

Green industries do not cause environmental pollution, thereby enabling coordinated and sustainable development of both the economy and the environment.



Creating Job Opportunities:

It provides a large number of employment opportunities, increases farmers' incomes, and consolidates the achievements of targeted poverty alleviation.



Cultivating New Types of Talent:

Cultivating "professional farmers," enhancing their professional competence, and retaining talent for rural development.



Driving the Development of the Industrial Chain:

It will foster synergy among upstream and downstream industries—including planting, processing, and sales—and attract talent to converge in this sector.



Flexible cooperation model:

Promote innovative models such as "agricultural cooperatives" and "harvest festivals" to flexibly operate and revitalize the rural economy.

● Product Model

Model		NXFR-30ZFC
Cooling operating conditions: ambient temperature 35° C / indoor temperature 21°	Refrigerating output kW	24.3
	Refrigerating capacity kW	7.8
Heating operating condition 1: ambient temperature 7° C / indoor temperature 20° C	Heating capacity kW	30.1
	Heating power (kW)	8.0
Heating operating conditions: Ambient temperature -12° C / Room temperature: 20° C	Heating capacity kW	20.3
	Heating power (kW)	7.5
Source		380V/3Ph/50Hz
Ambient temperature range	°C	-30 ~ 46°C
Tank temperature range	°C	5-36
Warehouse humidity range	%	5-95
Cryogen		R410A
Outline dimension	Long mm	12000
	Wide mm	3000
	Tall mm	3000



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