

Containerized PSA Nitrogen Generator 500 Nm3/h with 99.9% Purity and Plug-and-Play Installation

Our Product Introduction

for more products please visit us on nitrogeneratorsystem.com

Basic Information

- Place of Origin: Jiangsu, China
- Brand Name: GASPU
- Certification: ISO 9001:2015, CE
- Model Number: PN-500C
- Minimum Order Quantity: 1 Set
- Price: USD 180,000 - 320,000 / Set
- Packaging Details: Container-type skid loaded in 40ft open-top container, export seaworthy packing
- Delivery Time: 60-90 working days
- Payment Terms: T/T,L/C
- Supply Ability: 5 Sets per Month



Product Specification

- Power Supply: 380V / 3 Phase / 50Hz
- Nitrogen Purity: 99.9%
- Nitrogen Flow Rate: 500 Nm3/h
- Outlet Pressure: 0.8 MPa
- Dew Point: -45 C
- Container Type: 40ft Open-Side Container
- Highlight: Container Type PSA Nitrogen Generator , 500Nm3/h Containerized N2 Plant, PSA Nitrogen Generator 99.9% Purity



More Images



Product Description

Container Type PSA Nitrogen Generator 500Nm³/h (PN-500C)

The **PN-500C Container Type PSA Nitrogen Generator** is a fully pre-assembled, containerized nitrogen generation plant that produces **500 Nm³/h** of nitrogen at **99.9% purity** directly on site. Built inside a standard 40ft open-side container, the complete system integrates the air compressor, air treatment, PSA towers, buffer tank and PLC control, enabling plug-and-play installation without a permanent machine room.

Key Features

- **Container Type Design:** All components pre-mounted inside a 40ft open-side container for fast deployment and easy relocation.
- **Integrated Air Package:** Screw air compressor, refrigerated dryer and filters built in, reducing external utility connections.
- **99.9% Purity Output:** Stable nitrogen purity from 95% to 99.999% to match process requirements.
- **Full Automation:** PLC control with touch-screen HMI enables unattended 24/7 operation.
- **Plug-and-Play Installation:** Factory pre-commissioned, only power and cooling water connections required on site.

Technical Parameters

Nitrogen Flow Rate	500 Nm ³ /h
Nitrogen Purity	99.9%
Outlet Pressure	0.8 MPa
Dew Point	-45 C
Technology	Pressure Swing Adsorption (PSA)
Container Type	40ft Open-Side Container
Control System	PLC + Touch Screen HMI
Power Supply	380V / 3 Phase / 50Hz
Air Compressor	Integrated Screw Type
Installation	Plug-and-Play, Pre-Commissioned

Applications

Suitable for oil and gas, chemical blanketing, pipeline purging, mining, food packaging and electronics manufacturing where on-site containerized nitrogen supply is required.

FAQ

Q1: Does the container type PSA nitrogen generator include the air compressor?

A: Yes, the PN-500C integrates the screw air compressor, refrigerated air dryer and filtration system inside the container, so only power and cooling water connections are needed on site.

Q2: What purity can this containerized N₂ plant achieve?

A: The standard configuration delivers 99.9% purity at 500 Nm³/h, and purity can be adjusted from 95% up to 99.999% depending on your process requirement.

Q3: How fast can the container type nitrogen generator be installed?

A: The system is factory pre-commissioned and shipped as a single container unit. On-site installation typically takes 3-5 days including power connection and commissioning.

