



**MISSION CRITICAL
POWER EFFICIENCY
& SUSTAINABILITY**

XNRGY.COM





XNRGY manufactures superior products that provide maximum efficiency backed by data and 3rd party test results.



300+
Industry Professionals

OUR PROMISE

XNRGY Climate Systems, is committed to conserving our planet's resources by offering our **Premium-Green Solutions** that provide superior efficiency, energy recovery, lowest connected horse-power, with ultra-quiet sound and vibration levels for use in a wide range of applications, but with an emphasis on mission-critical applications.

We have the experience and expertise to provide you with the best solutions in the industry. Our core team at **XNRGY** can collectively boast **over 500 years** of HVAC experience. If you add it all together it's a combined value of **over \$1B US** for the systems engineered and designed under **XNRGY** leadership. We only share this to say, that you our customer, can expect the smoothest process and most efficient solutions available when you work with the team at **XNRGY**.



OUR MISSION

Through innovation, clean-tech, design and manufacturing we will provide impactful systems that dramatically **reduce building energy** and **water consumption** and achieve our customer's **sustainability, CO₂ emissions and decarbonization** goals.

XNRGY is a world-class manufacturer utilizing leading-edge manufacturing methodologies to reduce costs and improve quality.

XNRGY's business philosophy aims to minimize waste and optimize processes, saving our customers money and time. XNRGY deploys lean manufacturing processes:

- Demand Flow Technology (DFT)
- Kaizen
- 5S Management
- Quality Management System
- Value Stream Mapping
- Cost Improvement Program



2

Convenient Locations
Canada & United States



5555



Factory Witness Approval
Available for All Units

MISSION CRITICAL SOLUTIONS

Data Centers have it tough trying to balance the temperature in large-scale facilities with higher and higher server densities. **XNRGY's Mission Critical Solutions** include both **CRAH & CRAC** options suitable for applications ranging from 60kW to over 1000kW. Our rigorous design standards focus on reducing connected horsepower, and overall energy consumption, while maintaining precise temperature, making **XNRGY Mission Critical Solutions** the best choice for performance and reliability.

We offer one of the most efficiently engineered **CRAH & CRAC** units in the industry.

ENERGY EFFICIENCY

XNRGY Mission Control Solutions are designed to be highly energy efficient, utilizing a variety of innovative technologies to reduce energy consumption, such as our advanced **XⁿFans** and free cooling.

PRECISION AIRFLOW CONTROL

To ensure that all data center equipment is cooled evenly and efficiently. This helps to prevent hot-spots and prolong the lifespan of equipment.

IMPROVED COMPLIANCE

Our mission critical solutions can help mechanical engineers to meet their data center's sustainability goals. This is becoming increasingly important as more and more organizations are pledging to reduce their environmental impact.



THE X OFFERING - XⁿFAN ARRAY

XNRGY CRAH (CW) units use more **efficient cooling technology**, and have greater heat removal capabilities. Our modular units can extend capacity, and provide redundancy for critical applications, with reduced lead times for the **fastest delivery** in the industry.*

XNRGY CRAH FEATURES

- Cooling Capacity from 20kW -600kW
- 100% front access on all sizes
- Multiple Fan options
- Multiple Evaporative Cooling options
- Ultra-quiet XⁿFans are highly efficient and more dependable
- Unique fan array construction
- Free cooling options available to significantly reduce system energy consumption
- Optional back draft damper with close to zero system effect
- Multiple options for CW piping and valves
- Standard MRV 8 filters (optional up to MERV 14 filters)
- Manufactured in one of our 2 convenient production locations either Canada or United States

XNRGY CRAC (DX) cooling systems have the highest level of reliability and are **custom-engineered** for **maximum efficiency**, all include fully optimized user-friendly controls.

XNRGY CRAC FEATURES

- Cooling Capacity from 60kW -1050kW or 13 to 300 Tons / 1 to 6 Circuits with up to 1:120 Turn-down Ratio (6 Circuits)
- 100% front access on all sizes
- Variable Speed Lead Compressor
- Inverter technology mixed with fixed speed technology and improved sequence of operation (SOP) for superior part load performance
- Electronic expansion valve with Modbus for precise humidity and temperature control
- Microchannel condenser for better efficiency and lower refrigerant charge + EC axial fan
- Hot gas reheat option with modulating 3-way valve for precise humidity control
- Option of low-temperature ambient cooling kit
- Manufactured in one of our 2 convenient production locations either Canada or United States



OUR CONTROLS

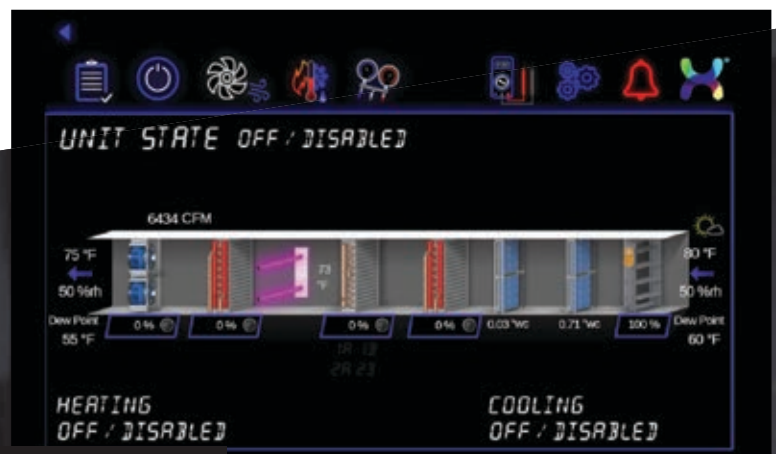
XNRGY controls are flexible and can be customized to meet the needs of any application, regardless of size or complexity. Our **innovative controls** employ the latest technology to provide our customers with the **most efficient, secure, and reliable solutions** available today. Our controls technology is designed and installed at the factory, allowing us to provide a fully-packaged solution for each project.



Simple and elegant solution that provides single point of control to fully utilize the operational savings and diagnostic benefits that modern fans offer.

KEY FEATURES OF XNRGY CONTROLS

- Stand-alone DDC controls
- Native BACnet with the option for Modbus
- All essential and critical points are available to BMS via protocol.
- Itemized, detailed alarms with flexible control configuration customized for each application.
- Failsafe fan speed options
- AUX contact(s) provide flexibility for remote start, override, or other site specific emergency options
- Sequencing tailored to customer requirements.
- Available on all **XNRGY** products
- Universal protocols for BMS integration. Serves as integration gateway for motors
- Reduce system installation and commissioning times with live point-to-point data displayed on HMI.
- Automatically configures fan motor control parameters. Scans, identifies, repairs.
- Visual I/O diagnostics
- Localized unit-level controls provide an additional redundancy layer for the site.



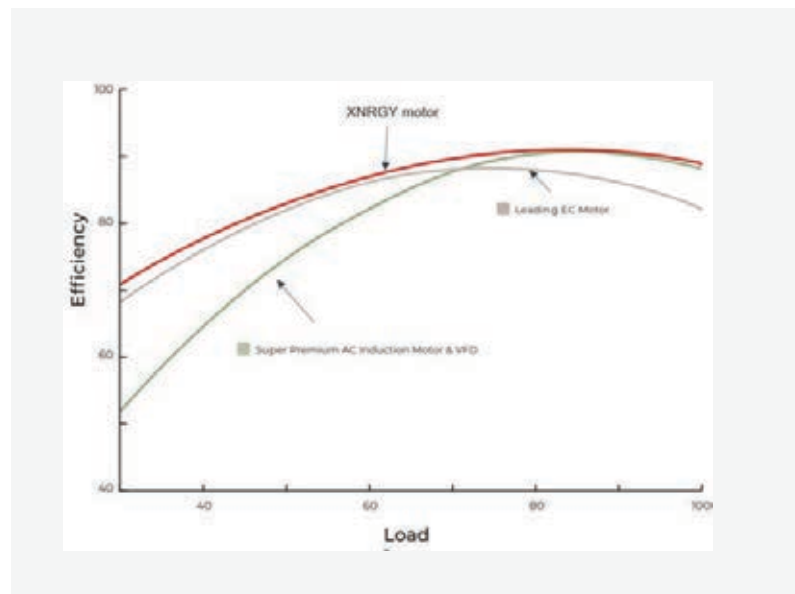
Industry Preferred
Custom Controls

Xⁿ FANS & FAN ARRAY

The **numerous benefits** of using fan arrays are well-understood in today's highly competitive market. Uniform airflow, a smaller footprint, redundancy, high efficiency, low maintenance, lower sound levels, and retrofit simplification have made **fan arrays much more popular than conventional.**

XⁿFan is available in steel or aluminum, in a wide range of sizes. Each fan size is available as an array to meet virtually any air flow requirement at the highest efficiency possible. This is especially important in **low-pressure, high-volume applications**, such as those found in data centers and high-efficiency buildings. Motor choices include premium efficiency induction, permanent magnet or ECM and switched reluctance.

Unlike other manufacturers who use conventional welded fan frames, the **Xⁿ Fan Array** uses a unique framing design that provides the greatest flexibility and strength on the market. The ease of assembly and precise fit of each component results in a system that can be **fully customized to meet the needs of each project.** All fan frames are designed to have the smallest footprint possible in height, width, and airway length. Frames are built using structural sections with stainless steel connectors.



HIGHEST SYSTEM EFFICIENCY IN THE MARKET

Unlike other manufacturers who purchase standard off-the-shelf fans the **XⁿFan** is specifically designed to operate in an array. All aspects of the design, including motor and drive selections, work seamlessly with the fan to provide the highest efficiency, lowest noise and lowest vibration in the industry. All fan arrays can be configured for N-1 redundancy or higher.



SPEED & SCALE

In 2022, the company announced the construction of a new state-of-the-art manufacturing facility in **Mesa, Arizona**. The first phase of construction will start with a **250,000 sq.ft. facility** that will become **XNRGY**'s new Technology Center of Excellence and will focus on research and development, directing innovation to support the rapid growth and demand for **XNRGY**'s mission-critical climate systems focused on sectors such as data centers and semi-conductor cleanrooms.

This Arizona facility will be home to a team of world-class engineers and scientists who are dedicated to pioneering the most innovative HVAC systems for **mission-critical applications**.

The new facility will be equipped with state-of-the-art semi-automated manufacturing equipment, and thermal testing facilities. Additional construction phases are planned for facility expansion of up to a million square feet.



Q4 2023

Phase 1 Plant Ready
250,000 sq ft + 3x 250,000 sq ft





XNRGY CLIMATE SYSTEMS

We at **XNRGY** consider ourselves a **“Premium-Green”** brand.

What is a **Premium-Green** brand you might ask?

Well, we believe it’s a brand that focuses on creating and selling products and **services that are environmentally friendly, conserve our natural resources, and are sustainable.**

Brands like ours are committed to **reducing their environmental impact** and helping their customers do the same.

Premium-Green brands like **XNRGY** focus on the following to optimize their products for lower energy consumption and highest efficiency:

SUPPLY CHAIN SUSTAINABILITY

XNRGY is committed to sourcing sustainable materials for use in our products, utilizing recycled and renewable materials whenever possible. We utilize **environmentally and socially sustainable practices** at every stage to protect the people and environments that could be affected across the whole chain.

As an organization, we uphold environmental and social standards for our operation and the operations of our suppliers. This helps to reduce the environmental impact of our products and conserve our natural resources.

DESIGNING ENERGY-EFFICIENT PRODUCTS

XNRGY designs our products to be as **energy efficient** as possible. This means sourcing and testing energy-efficient components and designing the product in a way that **maximizes energy recovery and minimizes energy waste.**

MANUFACTURING PRODUCTS IN AN ENVIRONMENTALLY FRIENDLY WAY

XNRGY manufactures our products in an environmentally friendly way. This means using **renewable energy sources, reducing waste, and minimizing pollution.**

In addition to these specific measures, **XNRGY** is also focused on educating our customers about the importance of sustainability and how to use their products in a sustainable way. We offer programs to help our customers reduce their environmental impact, such as recycling programs and energy-saving tips.



24/7 SERVICE

At **XNRGY**, we care about the **quality of our products** and we know that downtime is not an option for data center operators.

That's why we test every piece of equipment before it leaves our building and offer comprehensive service solutions to **maximize the efficiency and reliability** of our units installed in data centers and other mission critical applications.

We're committed to helping you keep your **XNRGY system** running smoothly. That's why we offer 24/7 emergency response and a full-line of replacement parts. We also offer system commissioning assistance and owner training to help you get the most out of your **XNRGY** investment.

We're here to support you every step of the way, from planning and installation to ongoing maintenance and parts. We want you to be confident that you're in good hands with **XNRGY**.

