



# Power and Cooling Solutions

Demand for computing resources requires high-density power to fuel the growth in Artificial Intelligence (AI), deep learning, big data, rich media, and more. EdgeConneX is committed to efficient, sustainable power solutions.

Data centers are projected to use up to 20% of the world's electricity supply by 2025. Demand for processing power, capacity, space, and connectivity will continue to grow worldwide, including emerging markets with growing Internet services. Today's growing global economy, environmental concerns and energy shortages require that we become more efficient and sustainable as we help you to Empower Your Edge.

## Power Optimization

The demand for data center resources is growing exponentially due in part to the expanded reach of Internet services – more people, more devices, and more apps are being connected. Additionally, emerging technologies are requiring more power, compute, and connectivity than the last generation of technology consumed.

EdgeConneX works closely with customers to improve the power density in our 40+ data centers worldwide, driving efficiency and working with local utilities to identify creative solutions for generating energy in power-constrained markets as demand rises.

## High Density Power

Older, legacy data centers struggle to meet today's high density demands. EdgeConneX data centers offer up to 30kW per rack with standard containment solutions and even higher density deployments leveraging advanced cooling technologies. This allows more computing power to occupy a smaller physical footprint, and allows our customers to take advantage of new, more energy-efficient processors and servers that require less power to perform even more processing-intensive work.

EdgeConneX also has the experience to provide industry expertise on the key business drivers regarding power options, including gray energy for fixed rate schedule and indexed pricing options, and green energy with tariff evaluations, local and regional Renewable Energy Credits (RECs), direct power purchase agreements, and other creative solutions.

## BENEFITS

### POWER:

- Purpose-built facilities, from 500kW to 100MW
- High-Density power design, 30+kW per rack
- Creative power solutions where needed

### APPLICATIONS:

- Artificial Intelligence
- Machine Learning
- Cloud & Gaming
- High-Resolution Video Streaming
- Big Data
- Data Sciences
- Industrial IoT



## Success Stories

- ✓ In a power-deficient market, while the local utility worked to generate adequate power, EdgeConneX innovated a medium-term solution using N+2 natural gas generators for a new 14MW facility and delivered the new data center in less than 10 months.
- ✓ EdgeConneX has engineered power solutions for facilities ranging from 25kW to 40MW, identifying and delivering the right solution for each customer, at any scale, worldwide.
- ✓ To date, we have delivered 200 MW of purpose-built capacity across our global portfolio.

## EdgeConneX Benefits

-  **Customer Experience**
  - Collaborate with our customers to fulfill your power requirements, accommodating powered shells to turn-key data centers from 500kW to 100MW facilities.
  - Flexible billing options including market pass-thru, all-in, and PUE models.
  - Customer portal providing real-time visibility across power usage, temperature, humidity, and ticketing
-  **Implementation**
  - Work directly with the utility companies to secure power for day 1 and beyond
  - Provide flexible whitespace design to optimize power and cooling based on your density requirements.
  - Modular data halls from 500kW to 1+ MWs supporting rapid deployments
-  **Power and Cooling**
  - Standard 30" raised floors optimize power usage with industry-leading, energy efficient units and economizers to ensure ASHRAE standards are met.
  - In power deficient markets, we engineer solutions to meet your time-to-market requirements from temporary power to substation solutions.
  - Distributed redundant design and power feeds allowing 2N at the cabinet level.
-  **Operational Excellence**
  - Continuously and proactively managing PUE by utilizing industry leading techniques:
    - Blanking panels for containment
    - Managing customer airflow requirements
    - Hotspot mitigation
    - Hot/cold aisle containment and vertical exhaust ducts (VED)
  - Global operational system that provides real-time reporting, cooling adjustments, event notification, and triage correlation.

For more information, email [info@edgeconnex.com](mailto:info@edgeconnex.com) or call us today: 1.866.304.3217