

**intelliflex**   
*Innovative Data Solutions*

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**OCTOPOD** 

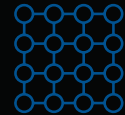


# MODULAR DATA CENTER



## Scalability

Our modular solution offers unmatched scalability, allowing for seamless expansion of your infrastructure to meet your growing capacity, ensuring optimal performance and efficiency at every stage.



## Density

OctoPod offers exceptional density, matching the ever growing computing demand, while maintaining efficiency and minimizing infrastructure footprint thanks to our innovative modular design.



## Serviceability

Serviceability and redundancies were key considerations when OctoPod was designed, making for ease of operation & maintenance, allowing for maximum uptime.



## Efficiency

Achieve unparalleled efficiency with OctoPod. The cutting-edge liquid cooling system ensures maximum performance while minimizing energy consumption, and reducing your operational costs.



## Flexibility

Experience limitless possibilities with OctoPod's innovative modular design. Whether you prefer traditional or liquid cooling, our system seamlessly accommodates all leading computing hardware available on the market.



## Industrial build quality

Built to the highest industrial standards and features top-tier product selection, the OctoPod sets the quality benchmark in the industry. Trust our robust design to deliver consistent performance and longevity for your data center infrastructure.



## SYSTEM OVERVIEW

***The Intelliflex™ OctoPod solution is a modular, start-to-finish line of products purpose built for today's high performance data centers.***

The OctoPod is a fully integrated modular system for the ever-evolving data center industry. Designed and built in our state-of-the-art North American manufacturing facilities, our team boasts over a century of combined experience in multidisciplinary engineering and craftsmanship. This modular solution meets expectations with unmatched density, scalability, and customizable options tailored to your specific needs and preferences.

This comprehensive solution, with its versatile cooling system, supports all current computing hardware and anticipates future upgrades. This forward-thinking design ensures compatibility and readiness for the latest technologies, providing seamless integration and optimal performance as new hardware becomes available on the market.



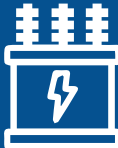


Elevate your operations today and stay ahead of tomorrow's challenges. Let's take a deep dive into the technical data and options that OctoPod has to offer.



# MODULE DESCRIPTIONS




# HIGH LEVEL SPECIFICATIONS

## STANDARD MODULES

	<b>Block Capacity</b>	<b>OctoPod Capacity</b>	<b>Details/Options</b>
 <p><b>COMPUTE</b> modules house all of your server and network racks/immersion tanks and associated smart PDUs. It includes all of your power distribution bus system and liquid cooling pipe rack assemblies.</p>	<ul style="list-style-type: none"> <li>• Computing load: up to 7.5MW</li> <li>• Compute racks: 80 units</li> <li>• Up to 4,160U rack space</li> </ul>	<ul style="list-style-type: none"> <li>• Computing load: up to 30MW</li> <li>• Compute racks: 640 units</li> <li>• Up to 33,280U rack space</li> </ul>	<ul style="list-style-type: none"> <li>• Cooling options:                             <ul style="list-style-type: none"> <li>• Liquid immersion</li> <li>• Direct to chip</li> <li>• Air cooling</li> </ul> </li> </ul>
 <p><b>COOLING</b> modules include chiller units paired with roof-mounted dry coolers, equipped with variable speed control for optimal efficiency. Three chiller systems, and associated dry coolers and piping allows for N+1 redundancy.</p>	<ul style="list-style-type: none"> <li>• Cooling capacity: up to 7.5MW</li> <li>• Ambient temp: up to 122F</li> <li>• Chillers: 12 x 750KW / 250Ton</li> </ul>	<ul style="list-style-type: none"> <li>• Cooling capacity: up to 30MW</li> <li>• Ambient temp: up to 122F</li> <li>• Chillers: 48 x 750KW / 250Ton</li> </ul>	<ul style="list-style-type: none"> <li>• Economizer</li> <li>• Heat recovery</li> <li>• Automated controls</li> </ul>
 <p><b>MEGABOX</b> modules are unit substations that handle medium voltage, power transformation, metering, and protection downstream from the switchgear building.</p>	<ul style="list-style-type: none"> <li>• Power capacity: up to 18MW</li> <li>• Unit capacity: 6 x 3MW</li> <li>• Primary voltage: up to 69KV</li> <li>• Secondary voltage: 415V</li> </ul>	<ul style="list-style-type: none"> <li>• Power capacity: up to 72MW</li> <li>• Unit capacity: 24 x 3MW</li> <li>• Primary voltage: up to 69KV</li> <li>• Secondary voltage: 415V</li> </ul>	<ul style="list-style-type: none"> <li>• Power monitoring</li> <li>• Shunt trip</li> <li>• Dry type cast resin Split Core</li> <li>• Secondary Protection</li> </ul>
 <p><b>SWITCHGEAR</b> modules include incoming power utility cabinet, and all associated feeder breakers, and protections for the downstream medium voltage site power infrastructure requirement.</p>	<ul style="list-style-type: none"> <li>• Power capacity: up to 18MW</li> <li>• Voltage range: up to 69KV</li> </ul>	<ul style="list-style-type: none"> <li>• Power capacity: 72MW</li> <li>• Voltage range: up to 69KV</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 3 power sources</li> <li>• Optional transfer switch</li> <li>• Optional SCADA</li> </ul>
 <p><b>CONTROL ROOM</b> modules are tailored to your specifications, to house operator stations, central servers, networking hubs, workshops, restrooms, etc. offering a fully customizable solution to meet your needs.</p>	<ul style="list-style-type: none"> <li>• Footprint: 720 sqft</li> </ul>	<ul style="list-style-type: none"> <li>• Footprint: 720 sqft</li> </ul>	<ul style="list-style-type: none"> <li>• Main operator control station</li> <li>• Central servers and network racks</li> <li>• Customizable work space</li> <li>• Restroom / change room</li> </ul>

## Recommended Specifications

## OPTION SELECTION

 <p><b>DRUPS</b> Diesel Rotary UPS. Combines an uninterruptible power supply with a diesel generator into a single integrated system. By using kinetic energy stored in a flywheel, the DRUPS provides immediate power during an outage while the generator starts, delivering a seamless, fuel-efficient, and highly reliable backup solution.</p>	<ul style="list-style-type: none"> <li>• Rated power capacity 14.4MW</li> <li>• 6 to make 5 configuration</li> <li>• MV 12.47 KV output</li> <li>• +/- 1% voltage regulation</li> <li>• +/- 1 Hz dynamic conditions</li> </ul>	<ul style="list-style-type: none"> <li>• Rated power capacity 57.6MW</li> <li>• 6 to make 5 configuration x 4</li> <li>• MV 12.47 KV output</li> <li>• +/- 1% voltage regulation</li> <li>• +/- 1 Hz dynamic conditions</li> </ul>	<ul style="list-style-type: none"> <li>• Fuel: diesel</li> <li>• Standard operation 65dba</li> <li>• 24h run time</li> <li>• UL142 dual wall fuel tank</li> <li>• 10 year bearing life</li> </ul>
 <p><b>BATTERY &amp; UPS</b> our UPS and battery solutions are designed with flexibility in mind, allowing them to be tailored to any specific requirement. Fully compatible with a wide range of energy storage technologies available on the market today, ensuring seamless integration, reliable operation, and long-term performance.</p>	<ul style="list-style-type: none"> <li>• Battery capacity: 2.5MWh</li> <li>• Power capacity: 15MW</li> <li>• 12 Independent UPS systems</li> <li>• 12 x 2500Amp busway</li> </ul>	<ul style="list-style-type: none"> <li>• Battery capacity: 10MWh</li> <li>• Power capacity: 60MW</li> <li>• 48 Independent UPS systems</li> <li>• 48 x 2500Amp busway</li> </ul>	<ul style="list-style-type: none"> <li>• 10 min. runtime @ 100% capacity</li> <li>• Lithium ion batteries</li> <li>• Up to 99% efficiency</li> <li>• &lt;3% harmonic distortion</li> </ul>
 <p><b>STANDBY GENERATION</b> our standby power solutions can be designed and adapted to integrate with the power generation solution of your choice, including diesel or gas generators and turbines. This ensures reliable backup capacity and uninterrupted operation for mission-critical facilities.</p>	<ul style="list-style-type: none"> <li>• Power capacity: up to 18MW</li> <li>• Unit capacity: 6 x 3MW</li> <li>• Voltage: 415V</li> </ul>	<ul style="list-style-type: none"> <li>• Power capacity: up to 72MW</li> <li>• Unit capacity: 24 x 3MW</li> <li>• Voltage: 415V</li> </ul>	<ul style="list-style-type: none"> <li>• Fuel: diesel</li> <li>• Level 3 sound enclosure 84dba</li> <li>• 24h run time</li> <li>• UL142 dual wall fuel tank</li> </ul>



### NETWORKING CABLE TRAY

Multi-layer overhead cable management system engineered for efficient connectivity and expanded routing capacity.

### BUSWAY SYSTEM

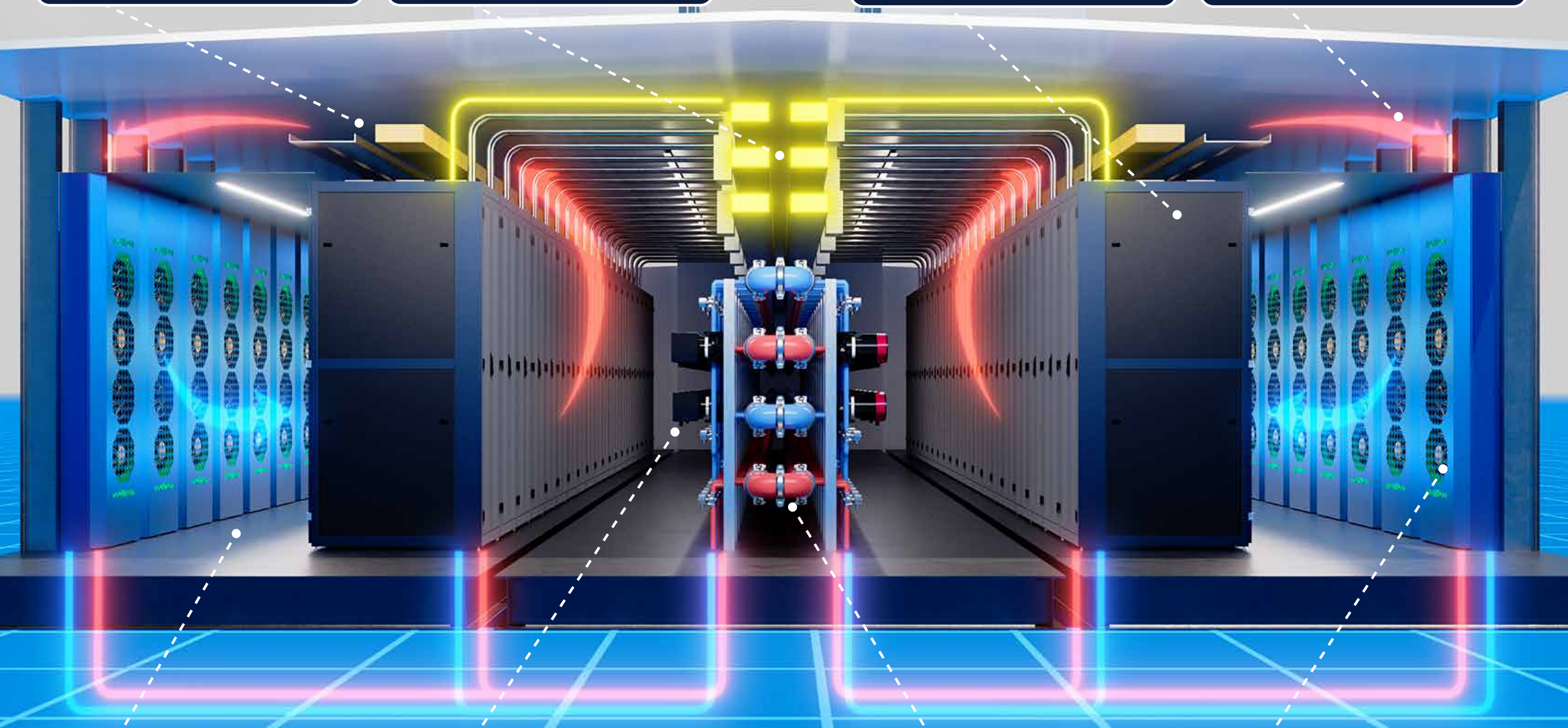
Modular power delivery designed for flexibility, scalability, and uptime — with an N+1 architecture that minimizes fault risk.

### DLC RACK

High-performance liquid-cooled rack designed for modern AI and HPC systems — built with a forward-thinking architecture ready for NVIDIA's next-generation 800V DC hardware.

### AIR PLENUM

High-efficiency air plenum designed to separate thermal zones and manage hot air return to the CRAH units.



### COLD AISLE

A contained cooling zone that channels conditioned air directly to active equipment for peak performance and efficiency.

### ICDU

The Intelliflex Coolant Distribution Unit is a concurrently maintainable smart liquid cooling distribution unit balancing flow and temperature across each rack and CRAH.

### FACILITY WATER MAIN HEADERS

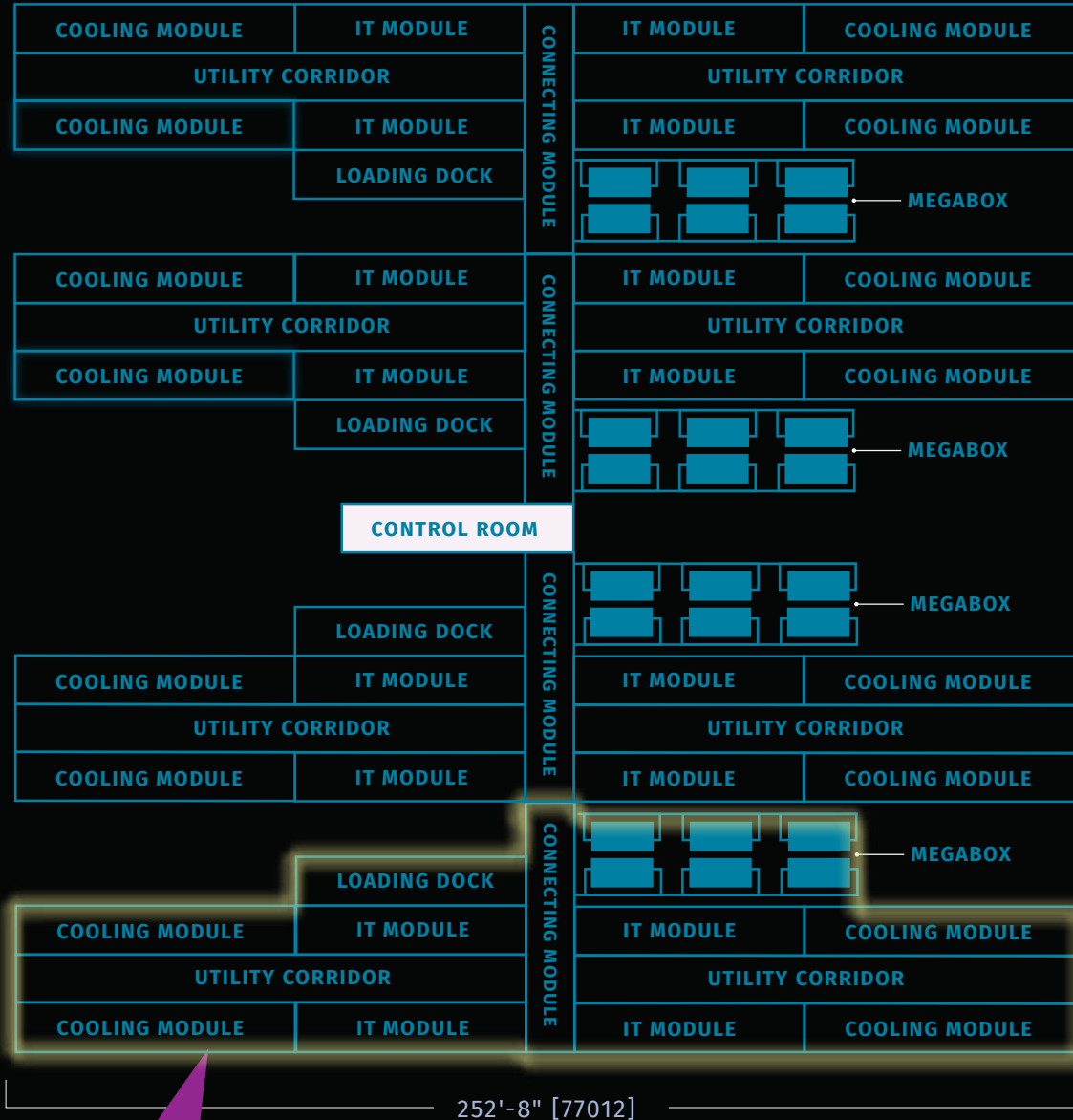
Centralized 2N cooling backbone supplying chilled water to the entire Octopod system.

### CRAH

Advanced air handler that circulates conditioned air through the cold aisle, ensuring consistent cooling and reliable performance.

## OCTOPOD

252'-8" [77012]



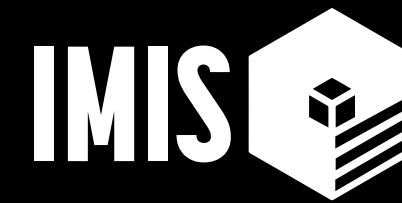
252'-8" [77012]

### OCTOPOD BLOCK (RATED CAPACITY)

BLOCK	TOTAL	COMPUTE	COOLING	AUXILIARY	PUE RANGE
FULL	11.2MW	7.5MW	3MW	700KW	1.2 - 1.4
HALF	5.6MW	3.75MW	1.5MW	350KW	1.2 - 1.4



# Modular support infrastructure inspired by OctoPod—delivered à la carte.



Intelliflex Modular Infrastructure Solutions

IMIS takes the proven modular thinking behind Intelliflex OctoPod and applies it to the broader support infrastructure that powers a data center campus. Where OctoPod is an integrated, repeatable “block,” IMIS is a mix-and-match portfolio of engineered modules—built to plug into your site plan and delivery strategy.

Each IMIS module is based on a standardized foundation that can be configured to meet client-specific requirements, enabling off-site manufacturing, integrated testing, and rapid deployment. Customers benefit from our engineering, supply chain, and production capabilities—while retaining flexibility in how the overall campus is designed and constructed.

An overview of the IMIS module types including:

Liquid-cooled data hall support

Medium voltage switchgear skids

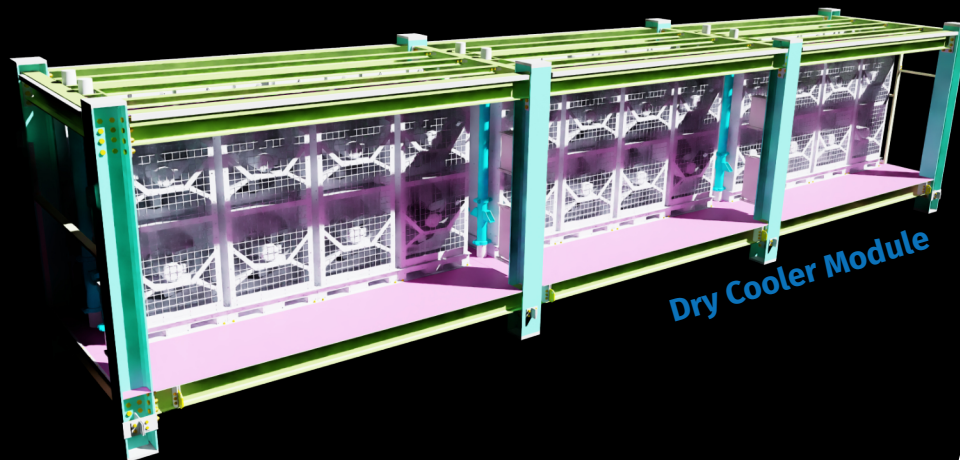
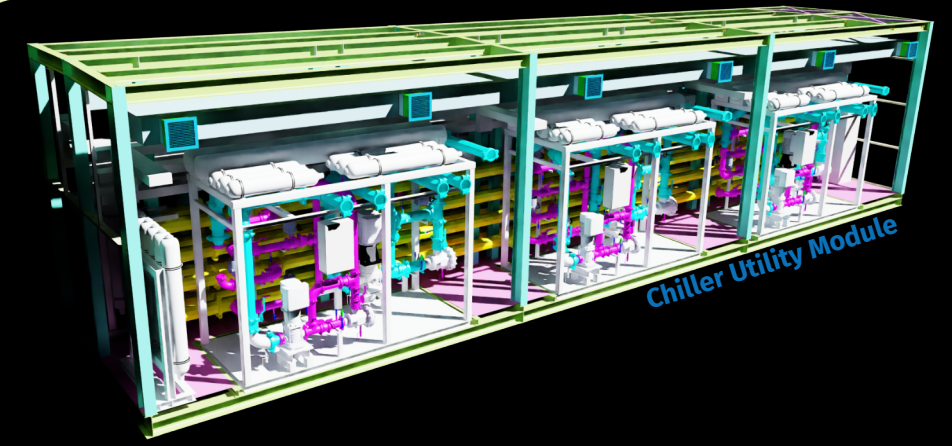
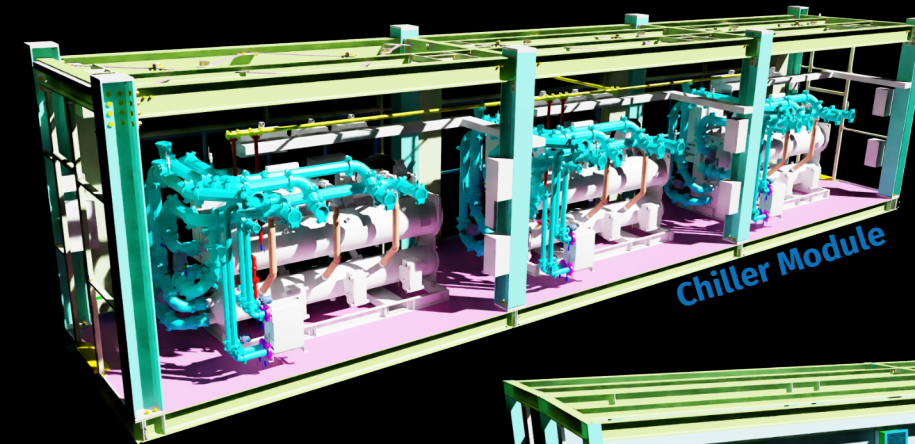
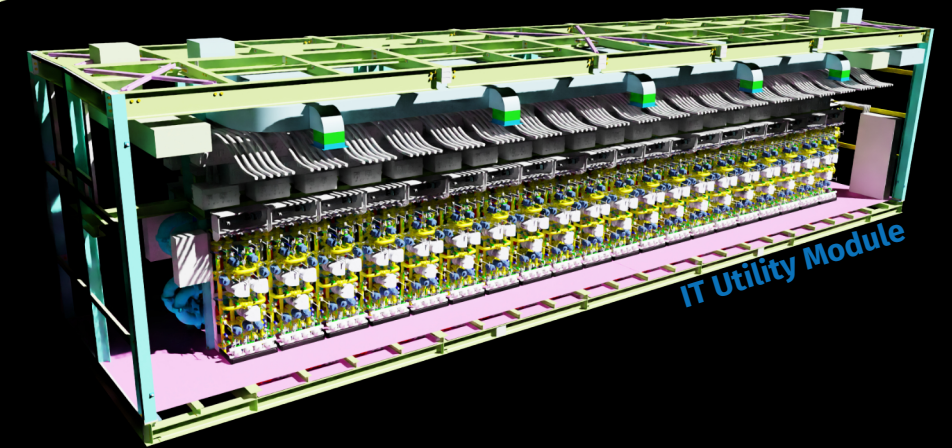
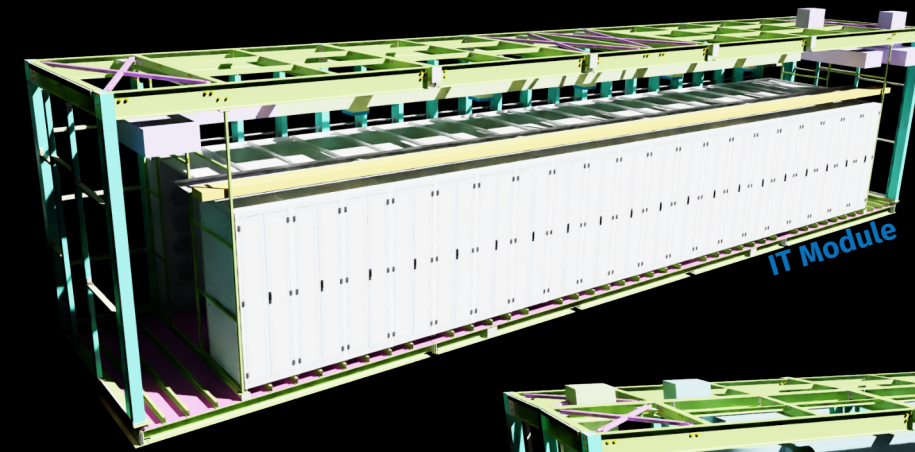
Power transformation skids

Chilling plants

Control rooms

Utility modules

Together, IMIS provides a practical, scalable way to procure and deploy critical campus systems—one module at a time, or as a coordinated set—with the quality and repeatability you expect from the Intelliflex platform.



## Power Distribution System

### Switchgear Module

Includes incoming power utility cabinets, CTs/PTs, all associated feeder breakers, protective relays and grounding switches for the downstream medium voltage power distribution system.

### Megabox

Dry-type/cast resin unit substation that handles medium voltage power transformation, low voltage distribution, metering, and protection downstream from the switchgear building.

### MV BESS

Energy storage system optimized for challenging AI workloads. Designed to support peak shaving, backup power, grid stability, and to comply with ERCOT interconnection requirements.

## Chiller Plant

### Chiller Module

Chiller modules are built for concurrently maintainable operation, delivering resilient, fault-tolerant cooling for mission-critical data centers.

### Chiller Utility Module

Chiller utility modules house piping manifolds, integrated pump system, buffer capacity, smart power distribution and associated components.

### Dry Cooler Module

Vertically stackable premium dry cooler modules feature simple skid-edge connections, low-noise fans, and automated controls that reduce sound levels and optimize PUE.

## IT Hall

### IT Module

Allows for 20 x 30" DLC server and network racks with associated CRAH units, integrated cable tray system. Optimized for MGX 1.2 - 1.3 deployments.

### IT Utility Module

IT utility modules house piping manifolds, distributed pump system, buffer capacity, smart power distribution and associated components.

## Configurable Modules

### Control Room

Modules are tailored to your specs, to house operator stations, engineering stations, control system servers, offering a fully customizable solution to meet your needs.

### Network Operations Center

Network Operations Center (NOC) modules deliver a secure, scalable command hub for real-time monitoring and control of mission-critical data center operations.

### Receiving Module

These modules have an overhead door for shipping/receiving, also can be utilized for daily maintenance and warehousing of site components.

### Flexible Module

A fully customizable module built to your specific needs. Meeting rooms, restrooms, employee lounge, training center. Let's collaborate, sky is the limit!





## WHY US

### **MULTI-DISCIPLINE ENGINEERING & MANUFACTURING TEAM**

Our team includes specialists in Electrical, Network, Automation, Structural, and Mechanical fields. Our team boasts over a century of combined experience, we're able to help realize every aspect of your data center needs.

### **MANUFACTURING FACILITY**

Our state-of-the-art manufacturing facility is equipped with the latest technology. We focus on precision and efficiency, ensuring top-quality production that meets the highest industry standards. Our 250,000 sq ft+ manufacturing facilities are capable of handling fast paced, large scale deployments. This ensures we can meet your demands quickly and efficiently.

### **COST- EFFECTIVE SOLUTIONS**

Having our engineering and manufacturing teams under the same roof streamlines the process from design to reality. The OctoPod's modular design speeds up site deployment while making the most of your available real estate. These factors combined make for the most cost-efficient solution on the market.

### **START-TO-FINISH APPROACH**

We provide a seamless service from design and manufacturing to deployment and site infrastructure. Our team ensures smooth startup, commissioning, ongoing site operations, and preventative maintenance services.





# OCTOPOD



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