



intelliflex 
Innovative Data Solutions



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The Intelliflex™ product line is a modular, start to finish solution, purpose built for today's high performance data centers.



INTRODUCING

CES Corporation, based in Acheson Alberta Canada, manufactures it's Intelliflex solution from our 62,000 sq. ft. state of the art facility; capable of building 300 Modular Data Centers every year.

THE IMMERSION MODULAR DATA CENTER | IMDC

Intelliflex™ IMDC provides you with the most efficient cooling method for your high-density computing hardware. A fully integrated solution that includes immersion tanks, process and cooling equipment in a small footprint. All modules are sold in combination with the Smart PDU for increased power, control and network management.

- The Intelliflex solution provides you with a quick deployment tailored to any infrastructure setting.
- Anticipate your Power Usage Effectiveness (PUE) to drop significantly (as low as 1.02) due to optimized use of your infrastructure and hardware.
- Provides you with (DCiE) energy efficiencies - up to 95% efficient use of power using the Intelliflex Solution.

MODULAR OPTIONS

Indoor IMDC - Provides up to 6MW capacity similar to the Outdoor IMDC but is designed for re-purposing existing warehouse or building infrastructure.

Outdoor IMDC - Provides up to 6MW of capacity capable of running 1,152 miners. This solution offers a fully integrated enclosed system including immersion tanks, associated process and cooling equipment in combination with the Smart PDU and a centralized, fully integrated power, network and control hub accommodating connection from utility.

TECHNOLOGY

Intelliflex Immersion Solution

*A purpose-built data center that provides
power, network, control and cooling in one
smart package.*

IMDC

The Immersion Modular Data Center (IMDC) offers you the best in class power, network and control - from utility to IT hardware

At the core of the Intelliflex™ product line stands a liquid immersion cooling solution, integrated to a Smart Power Distribution Unit (SPDU). This system is designed to meet and exceed your power, control, network, and cooling requirements for high-computing infrastructure.

Liquid immersion is a leading I.T. cooling practice that keeps your data running as efficiently as possible. From complete servers to miners, it involves submerging hardware components or electronics in a non-conductive dielectric liquid or coolant.

The system removes heat by circulating liquid in direct contact with hot components, then through a dry-cool system that involves fans or heat exchangers.

Immersion cooling fluids have a very good insulating property, making them safe to interact with electronic components. Combined with the circulation method described above, Intelliflex™ harnesses a single-phase method to cool hot electronic components.

ADVANTAGES

- Modular design allows for quick deployment and expansion
- Operate your hardware at maximum potential up to 4800W overclocked
- Reduced capital and operational costs
- Provides unmatched computing hardware density
- Prolongs the life of your IT hardware
- Multiple redundancies minimizing operational downtime
- Full control of receptacles and current monitoring
- Provides for a smaller carbon footprint
- Heat recovery option available
- CSA/UL/CE Certified



DESIGN

IMDC Design Review

*Smart by Design for those looking to evolve
their operations to the next level*

IMDC

Efficient and reliable by design

The Intelliflex IMDC is designed around your data center needs. This highly efficient and reliable solution has multiple redundancies, offering a robust system, minimizing operational downtime.

The IMDC makes large deployments fast and simple, anywhere power is available. Its modular design provides the ability to interconnect and expand your operation suiting any power capacity.

The IMDC offers capacity up to 6MW, allowing the operation of 1,152 single phase 240V or 768 3phase 415V miners operating at their full potential. The 24 immersion tanks are integrated with a Smart PDU accommodating up to forty-eight 20A duplex circuits, allowing for 96 – C19 receptacles; all power, control and network requirements are covered. Each IMDC includes centralized, fully integrated power, network and control hubs accommodating connection from utility.

All IMDC's come complete with an integrated redundant cooling system to accommodate any climate. The redundancy includes individual circulation pumps and fan cooled radiators that provides the most robust and reliable system on the market today.

STANDARD COMPONENTS

- 24 - Immersion Tanks
- 24 - Circulation Pumps
- 24 - PDUs
- 4 - 2200A PowerHub/SWG
- 4 - Cooling Pods
- Variable Frequency Drives
- Dielectric Fluids
- Ethernet Network Switch
- 25 "Smart" PDUs
- 6MVA MegaBox Transformer/SWG
- BusDuct/Cabling Interconnects

OPTIONS

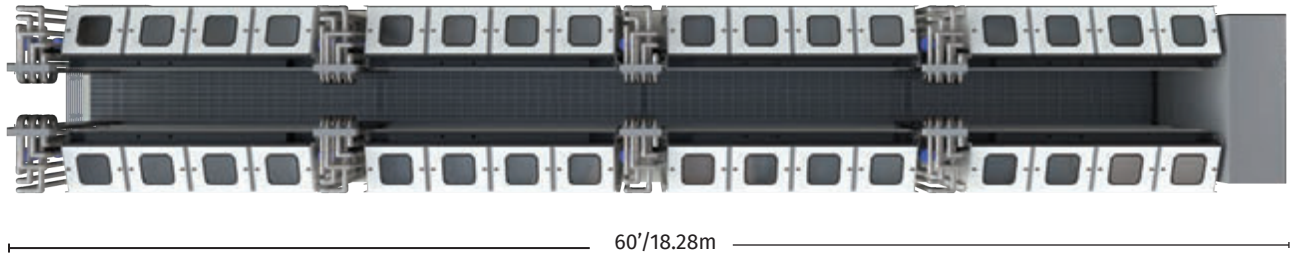
- Instrumentation Package
- Monitoring Package
- Module Interconnection
- Managed Ethernet Network Switch
- FlexConnect Software Platform (API)

DESIGN

Indoor IMDC

** images illustration purposes only*

TOP VIEW



SIDE VIEW



FRONT END VIEW



BACK END VIEW

DESIGN

Outdoor IMDC

** images illustration purposes only*



60'/18.28m



21'/6.4m

12'/3.65m



12'/3.65m



12'/3.65m



12'/3.65m

SOFTWARE

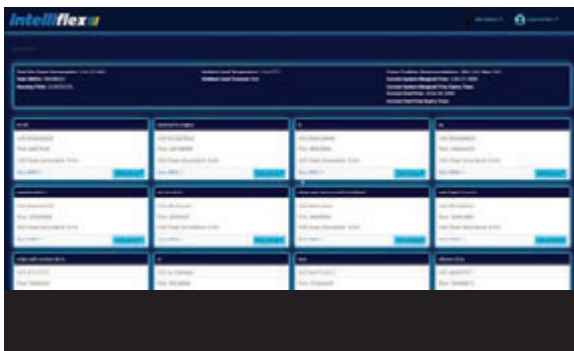
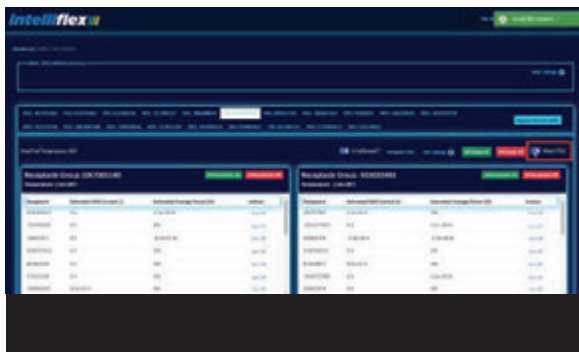
Intelliflex Software

*User interface and support
for Intelliflex systems*

Software & Support

The IntelliFlex Site Portal gives customers the ability to:

- Control their IMDC power in real-time, enabling you to turn receptacles on and off to start and stop miners or other computing infrastructure in real-time.
- Start and stop individual miners, sets of miners, a whole IMDC or even a whole site with a button click.
- Monitor the power consumption of individual receptacles to track functional or performance issues with individual miners or other computing units.



COMING SOON

Customers with an appropriate subscription will be able to:

- Monitor the profitability of their sites directly on their site portal using information from their local power provider.
- Automate the startup and shutdown of their IMDCs based on the pricing of power in their local market to optimize the returns of their operations, pushing operations right to the edge of power price spikes.
- Automate the leveraging of power provider rebate programs on unused power to increase returns in their operations.
- Access real-time support.
- Preventative maintenance program that generates automatic work orders to your operations team, all based on real time monitoring of the system.
- View the estimated power consumption of an IMDC in real-time to help control costs from your local power provider.
- Get access to system updates via connected VPN and a chosen support tier with time-delayed turnaround for site support.

DESIGN

Outdoor IMDC 6.0 Power Utility Connected



DESIGN

Outdoor IMDC 6.0 Gas Fired Power Generation



DESIGN

Outdoor IMDC 6.0 Heat Recovery/Greenhouse





CONTACT

Get Started Today

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