MOBILE CONTAINER DATA CENTER SOLUTIONS

MOBILE CONTAINER
DATA CENTER SOLUTIONS

Modular

Secure

Flexible

Green

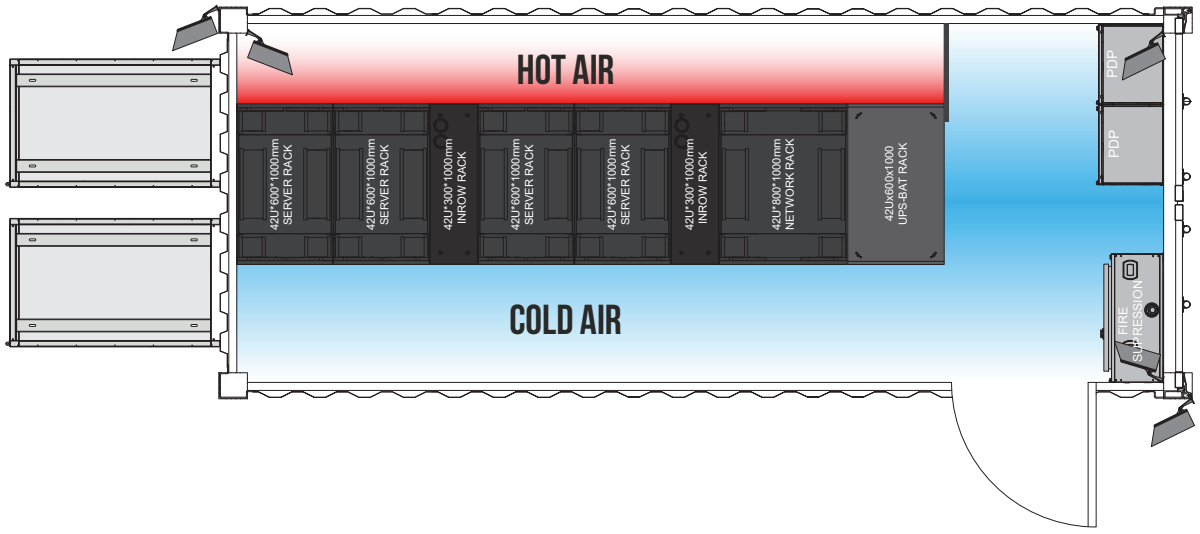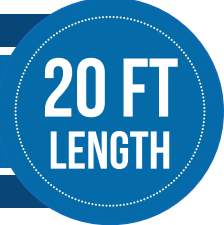Integrated

Energy Efficient

The mobile container data center provides a protected housing for the server cabinets, power distribution system, high precision air conditioning system, UPS system with backup banks, monitoring system, fire control system, and CCTV system.
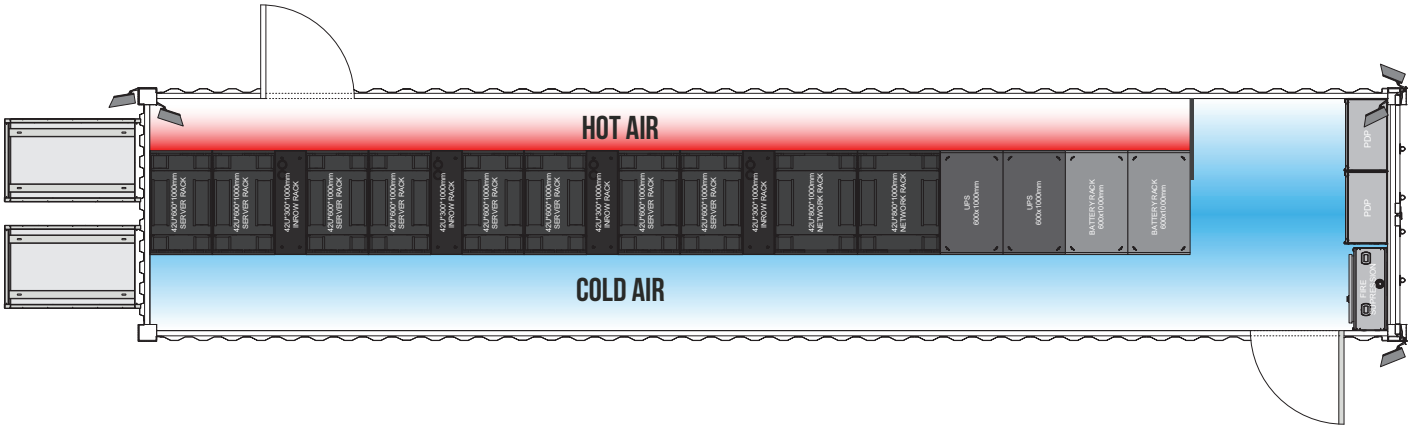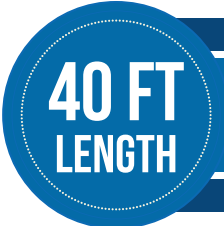The container data center provides the following functions:

- Houses the container components which can be interconnected inside in a centralized manner.
- Provides a secured environment to protect the container from external impact
- Modularity based on future expansion and capacity extension
- Quick deployment advantage against traditional building data center
- As pre-assembled, configured and factory tested solution before delivery

MOBILE DATA CENTER
CONFIGURATIONS

20 FT LENGTH

- 6058*2438*2591mm
- 5 Rack Cabinets
- N+1 Cooling Redundancy
- 2N Power Redundancy
- 30kW IT Load Limit

HOT AIR

COLD AIR

42U*600*1000mm SERVER RACK
42U*600*1000mm SERVER RACK
42U*300*1000mm INROW RACK
42U*600*1000mm SERVER RACK
42U*600*1000mm SERVER RACK
42U*300*1000mm INROW RACK
42U*800*1000mm NETWORK RACK
42Uk600x1000 UPS-BAT RACK
PDP
PDP
FIRE SUPPRESSION

40 FT LENGTH

- 12192*2438*2896mm
- 10 Rack Cabinets
- N+1 Cooling Redundancy
- 2N Power Redundancy
- 90kW IT Load Limit

HOT AIR

COLD AIR

42U*600*1000mm SERVER RACK
42U*600*1000mm SERVER RACK
42U*300*1000mm INROW RACK
42U*600*1000mm SERVER RACK
42U*600*1000mm SERVER RACK
42U*300*1000mm INROW RACK
42U*600*1000mm SERVER RACK
42U*600*1000mm SERVER RACK
42U*600*1000mm SERVER RACK
42U*300*1000mm INROW RACK
42U*600*1000mm NETWORK RACK
42U*600*1000mm NETWORK RACK
UPS 600x1000mm
UPS 600x1000mm
BATTERY RACK 600x1000mm
BATTERY RACK 600x1000mm
PDP
PDP
FIRE SUPPRESSION

MOBILE DATA CENTER
CONFIGURATIONS

45 FT LENGTH

13716*2438*2896mm
12 Rack Cabinets
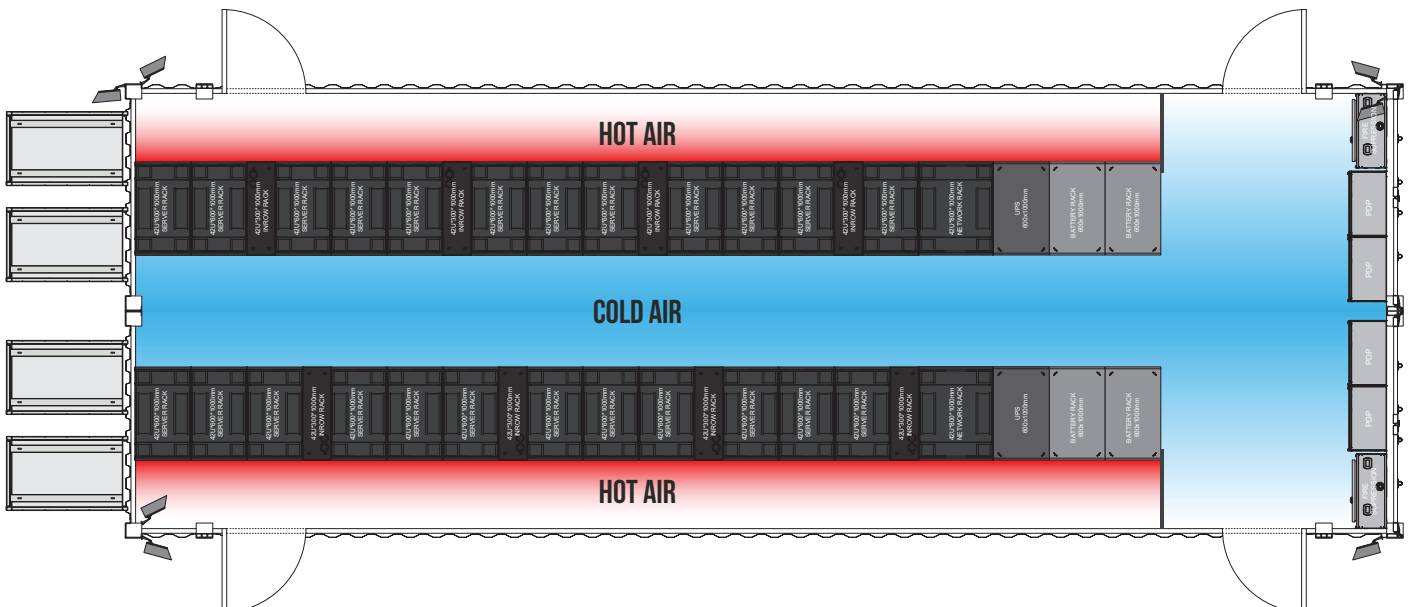N+1 Cooling Redundancy
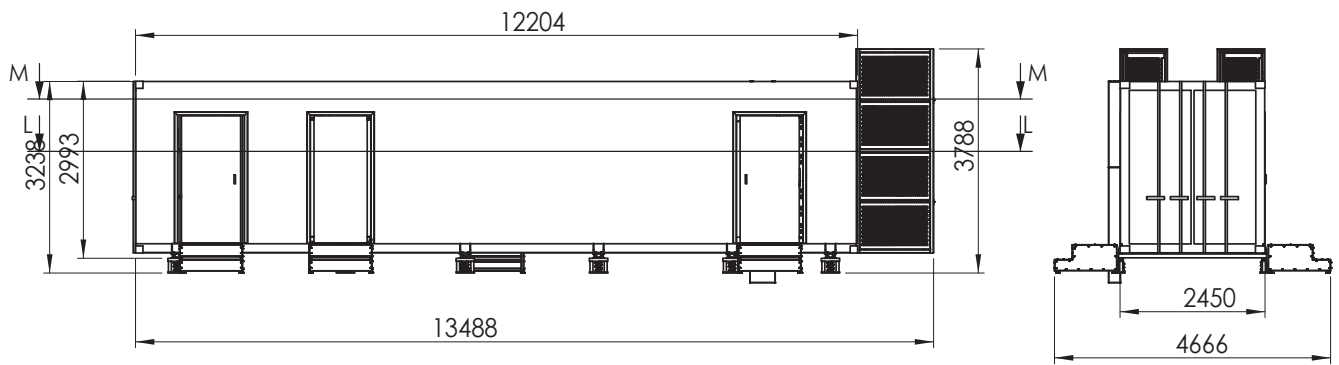2N Power Redundancy
120kW IT Load Limit

HOT AIR

COLD AIR
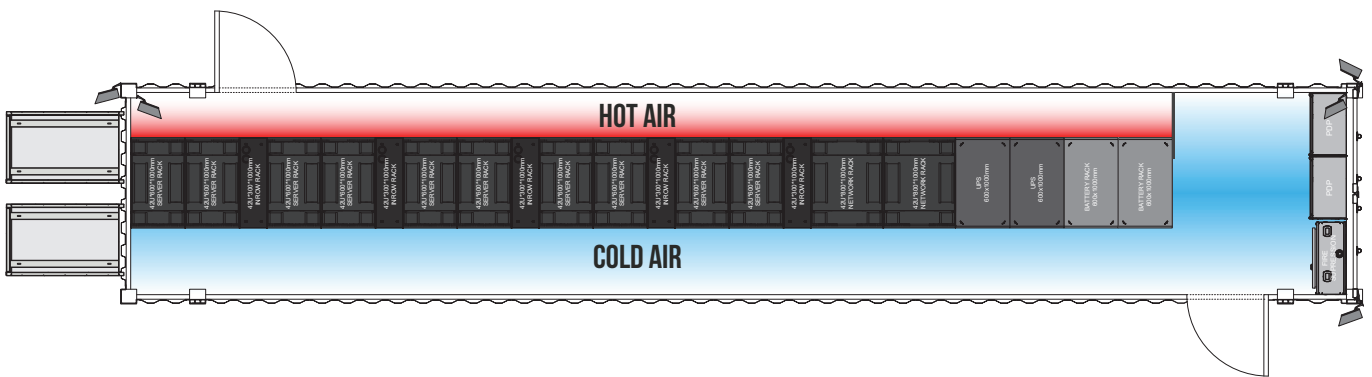
2X45 FT LENGTH

13716*4876*2896
26 Rack Cabinets
N+1 Cooling Redundancy
2N Power Redundancy
210kW IT Load Limit

HOT AIR

COLD AIR

HOT AIR

Dimensions: 12204, 13488, 2993, 3238, 3788, M, L, 2450, 4666

Canovate Mobile Data Center Series				
Configurations	CAN-CONT-20-XX	CAN-CONT-40-XX	CAN-CONT-45-XX	CAN-CONT-DBL45-XX
Model	20ft	40ft	45ft	2*45ft
Container Specifications				
"Dimensions L*W*H (mm)"	6058*2438*2591	12192*2438*2896	13716*2438*2896	13716*4876*2896
Container Weight - Loaded (T)	5	12	15	28
Container Type	Standard ISO Container			
Environmental Protection	IP55, Water-proof, Dust-proof			
Material	Trapezoidal steel sheet, 50mm Rack-wool insulation plates(Class-A1)			
Min/Max Operating Range (°C)	-20 to +50 (min -40°C as optional)			
Altitude (m)[1]	1000			
Service Life	25 years			
Rack Cabinet System				
"IT Rack Sizes W*D*H (mm)"	600*1000*2000 (Server Rack) + 800*1000*2000 (Network Rack)			
Quantity of Racks	4+1	8+2	10+2	24+2
Total IT Load (kW)	30	90	120	210
Air Conditioning System				
Cooling Type[2]	DX Based Inrow Cooling Units			
Sensible Cooling Capacity per Inrow (kW)[3]	32			
Inrow Cooling Unit Quantity	2	4	5	8
Redundancy Level	N+1			
Environmental Operating Range (°C)	-20~+50			
Power Management System				
Modular UPS Frame (kVA)	30	120	150	250
Backup Time (minutes)	Standard 10 mins (additional backup as optional)			
Power Distribution Unit	Monitored/Managable IP-PDU (20*C13+4*C19)			
Redundancy Level	N+N			
Management System				
Environmental Sensors	Temperature&Humidity, Smoke, Water, Door Contact, Vibration as default			
Data Center Infrastructure Management (DCIM)	Advance management software which shows real time monitoring for whole container environment including all electrical components inside the data center area			
Access Control	Fingerprint access controllers on main entrance door and sliding doors between cold-hot areas inside the container			
Video Survallance System				
Cameras	Bullet/Dome Type IP Cam, IP66, PoE, ONVIF			
Video Record	8 Channel NVR, 6TB HDD			
Fire Control System				
Detection and Extinguishing	Completely auto-sense detectors, point-based extinguishing with the nozzles for dedicated locations, visual-audible alarms with siren/strobe, manual release button, emergency stop function, user-friendly control panel			
Gas Type	FM200 or NOVEC1230 (Inert Gas as optional)			
Fire resistancy	F60 (Highly Fire Retardant)			

[1] Power and cooling derating is expected for more than 1000m altitude. Contact to technical department for more details.
[2] Air conditioning can be provided by CW based systems, CRAC/CRAH units, and even indirect evaporative systems as optionally
[3] Each Inrow cooling unit provides 32kW sensible cooling capacity while Treturn is 35°C and Tambient is 35°C

MOBILE DATA CENTER
EXTERIOR PAINTING SAMPLES

40 FT MOBILE DATA CENTER
COMPONENTS

Modular UPS

Movable Cable Duct
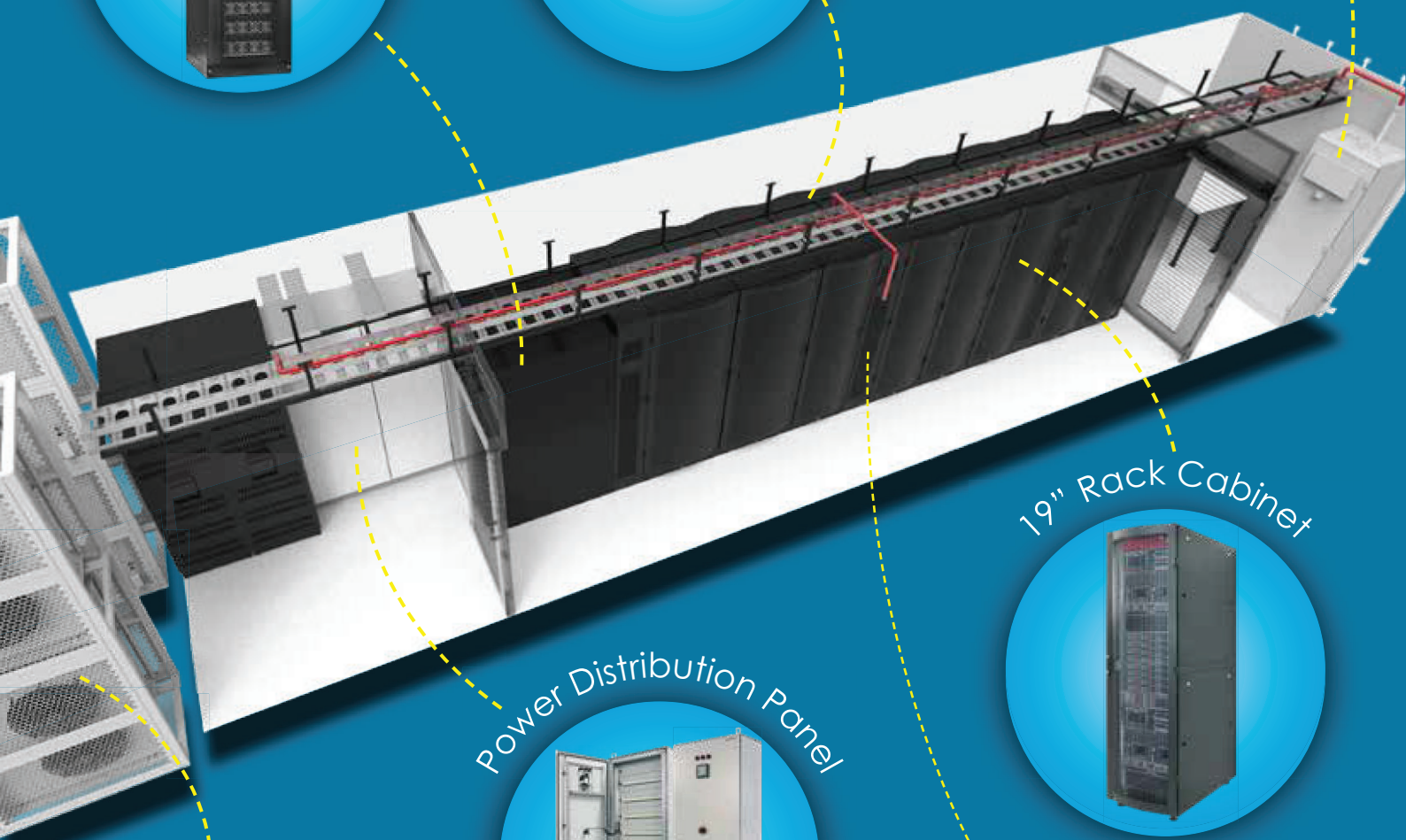
Modular Fire Suppression Systems
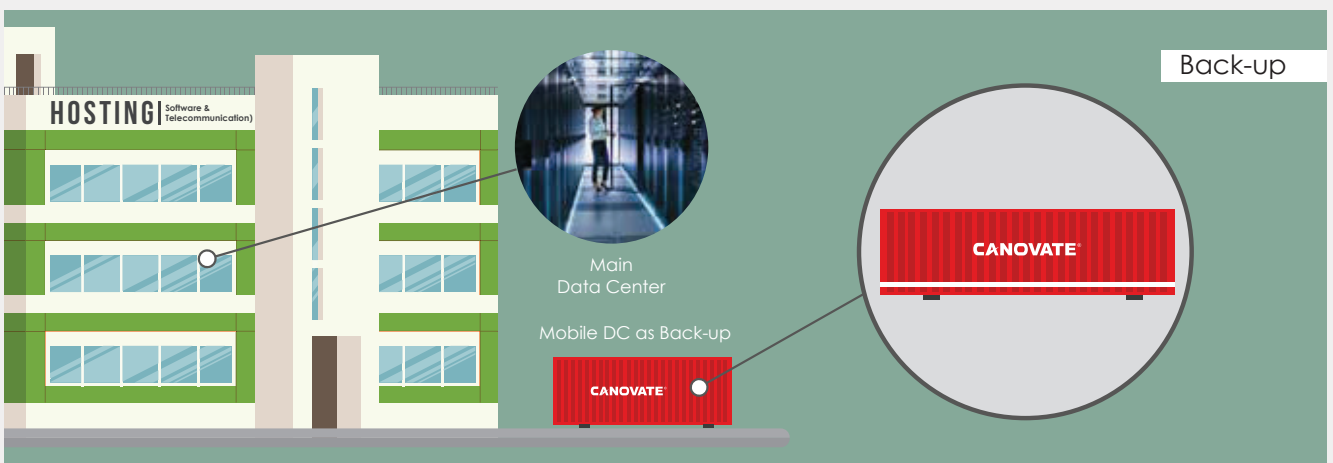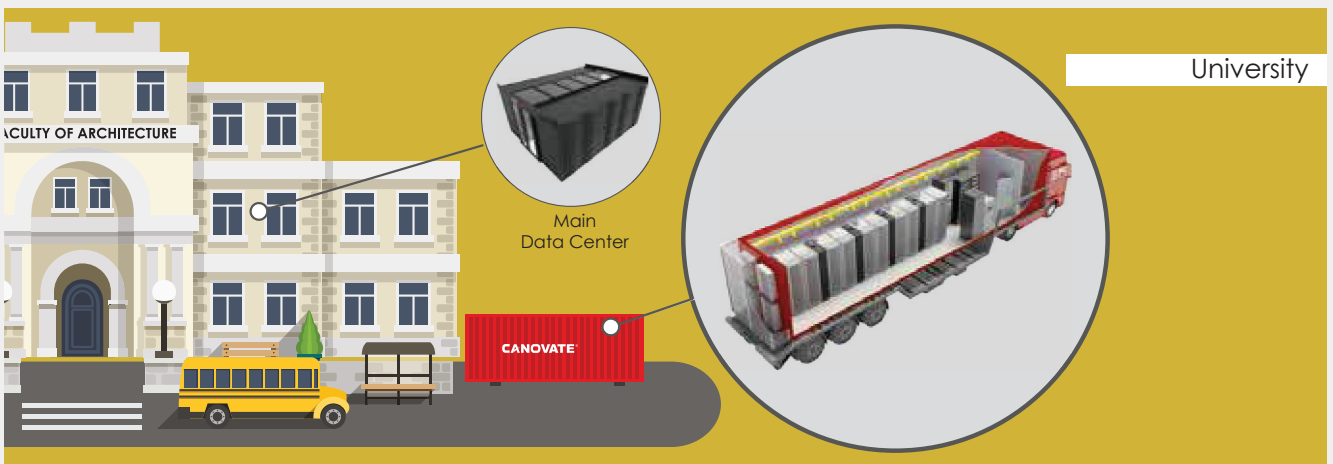
19" Rack Cabinet

Power Distribution Panel

Outdoor Cooling Unit

Inrow Cooling

MOBILE DATA CENTER SITE APPLICATIONS

Disaster Recovery

CANOVATE
TELECOM

University

ACULTY OF ARCHITECTURE

CANOVATE

Main
Data Center

HOSTING (Software &
Telecommunication)

Back-up

CANOVATE

Main
Data Center

Mobile DC as Back-up

CANOVATE

Temporary Events and Exhibitions

CANOVATE

CANOVATE

CENTER APPLICATION AREAS

TELECOM
Disastery Recovery

MILITARY
Mission critical datacenters
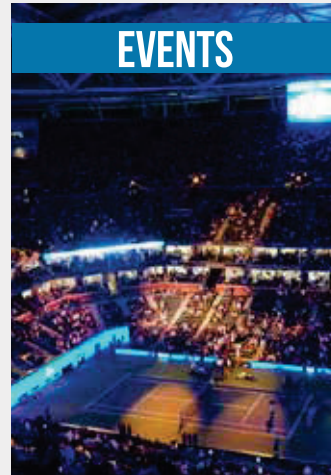
EVENTS
Big sport events and expo organizations
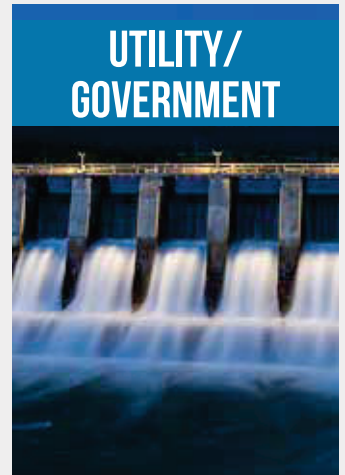
UTILITY/ GOVERNMENT
(Police, Electricity, Water companies etc.)

CONSTRUCTION SECTOR
Temporary datacenter for big construction sites (ports , airport)

ENERGY
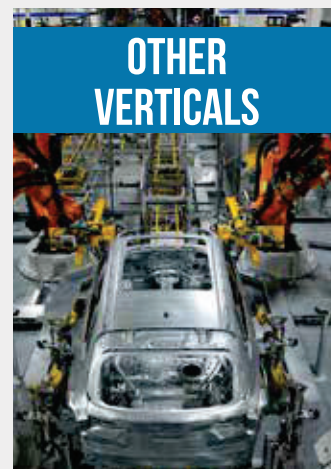Oil drilling sites and offshore oil platforms , Electricity and gas utilities
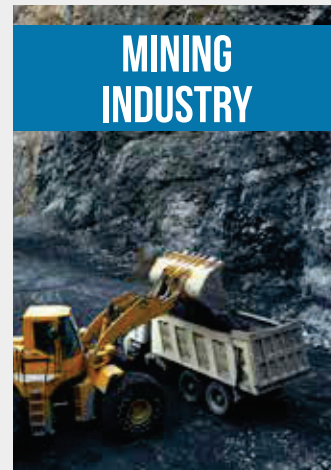
MINING INDUSTRY
Remote locations where there is no established infrastructure

HOSTING COMPANIES
Modular DC concepts (Interxion, Equinix etc)

FINANCIAL SECTOR
Disastery Recovery

OTHER VERTICALS
Automotive, Media,& Entertainment, Retail, Manufacturing, Transport , Research