FROG ENGINEERING

UL CERTIFIED
CSA CERTIFIED
UP TO 4 KW COOLING CAPACITY
IP 54/55 PROTECTION GRADE
RAL 9005 RAL 7035 COLOR OPTIONS

TOP COOLING

MICRO DATA CENTER
SOLUTIONS

An emerging trend in data center market is Micro DC, which provide cost-effective, energy-efficient data center services with a rapid deployment time frame.

Micro DC solution is an industry leader for efficiency and cost effectiveness.

Frog Engineering Micro DC solutions are an integrated solution that incorporates Racks, UPS, Cooling, Fire Suppression, PDU and EMS in a single, compact platform.

Remote monitoring features allow the group headquarters to perform unified management. The Micro DC concept also reduces Cap-Ex dramatically in comparison with traditional brick and mortar DC constructions, and it will enable your current and future customers to access the cloud easily and benefit from a resilient and fully supported infrastructure.

24U
36U
42U
47U

Highlights

- Micro Plug & Play Data Center including cooling, fire suppression, monitoring, power management and protection
- Stand-alone Data Center
- Eliminates raised floor and external cooling equipment requirements
- Individual rack cooling with from 2 kW up to 4 kW
- High level security with in rack fire protection and monitoring systems
- Advanced power management enabled by IP PDU and UPS systems
- Install Data Center where you want and need it
- Rapid deployment in 4-6 weeks from plan to start-up
- Low total cost of ownership
- Up to 50% space savings
- EMS (Environmental Monitoring System)
- DCIM option
- IP PDU
- UPS with VLRA battery pack(default) or Lithium (optional)
- Li-ion Tamer GEN 3 Lithium Ion Battery Off-Gas Detection System
- Fire Detection/Extinguisher System (0U). Free maintenance for 15 years. Aerosol HAFEX
- Protection Grade: IP55

PLUG & PLAY

PORTABLE DATA CENTER ON WHEELS

FROG ENGINEERING

COMPONENTS OF MICRO DATA CENTER

AC Unit
(Air Conditioning Unit)

Anti-condensation unit

IP-PDU

Audible and Visual
Alarm(siren or led
light array)
Optional

Camera
Optional

EMS
(Environmental
Monitoring System)

7" Color
Touch Screen (Optional)

Face Recognition
Device (Optional)

Air Flow Sensor

Humidity Sensor

Door Contact

Liquid Sensor

Smoke Sensor

Temperature

Standard (Key Display)

Other smart locks and fingerprint readers
are optional

MICRO DC.

Aerosol Fire Extinguisher
System with HAFEX

Power Distribution
Module

Rack UPS
(Uninterruptible
Power Supply)

SPECS OF MICRO DATA CENTER

Frog Engineering Standard Micro DC Configurations Top Cooling						
Cabinet System	Configurations	24U (1650mm)	36U (2260mm)	42U (2530mm)	47U (2790mm)
	Size Options	Width: 600-800mm, Depth: 1000-1100-1200mm			
	IT Load Limit	2-4kVA			
	Environmental Protection	IP55 (dust protected, splashing liquid protection) as default			
	Material	Aluminum chassis, steel components 1,5 -2 mm			
	Certification	UL, CSA, RoHS, REACH, TSE			
Air Conditioning System	Cooling Type	'Top mounting DX based cooling unit			
	Total Cooling Capacity	2-4kW			
	Sensible Cooling Capacity	1,9-3,9kW			
	Fan Airflow Rate	2kW: 800 m³/h, 4kW: 1600 m³/h			
	Refrigerant	R134A / R410			
	Cooling Power Supply	230V/1Ph/50-60hz or 115V/1Ph/60hz			
	Sound Level	55dB(A) from 1 meter			
	Communication Protocol	EtherNet/IP , ModBus TCP, ModBus RTU			
	Interface	WiFi, Ethernet,Bluetooth, local by screen			
	Weight	60 kg			
	Height x Width x Depth mm	455 X 850 X 500			
	Corrosion Protection	Stainless Steel			
	System of Protection	IP55			
	Condensation	Self-contained. No drain connection required			
Power Supply System	Rack-mount UPS	3kVA or 6kVA			
	Backup Time (minutes)	Standard 5 mins full charge and 15 minute half charge(additional backup banks as optional)			
	Battery pack	2U-3U.			
	Battery type	VRLA, sealed dry, maintenance-free or Lithium with Li-ion Tamer GEN 3 sensor. Detecting the release of gases from lithium-ion batteries and preventing disasters.			
	Power Distribution Unit	Basic or IP PDU (20*C13+4*C19)			
	Rack-mount Electrical Panel	3U Power Distribution Panel as optional			
Monitoring System	Environmental Monitoring Device	2U Control Module with digital/analog sensor ports User friendly embedded interface for remote monitoring, dashboards, energy management, notification settings over email, SMS or phone call 7" ColorTouch Screen (Optional)			
	Environmental Sensors	Temperature&Humidity, Smoke, Water, Door Contact as default			
	Access Control	Intelligent electronic lock with embeeded card reader (Keypad, fingerprint or facial recognition options are available)			
	Video Surveillance	IP or Basic Cameras and NVR device as optional			
Fire Control System	Detection and Extinguishing	Point-based fire extinguishing with fully automatic detection using HAFEX system			
	Aerosol	Aerosol based on Strontium Nitrate salts. Not pressurized.Maintenance free for 15 years. Typically HFX 100S, HFX 200S. Other sizes available.			

Top Cooling Model

Part number:	Description
DCMCT24U6010.0X-T	Micro DC 24U Width: 600 mm, Depth: 1000 mm
DCMCT36U6010.0X-T	Micro DC 36U Width: 600 mm, Depth: 1000 mm
DCMCT42U6010.0X-T	Micro DC 42U Width: 600 mm, Depth: 1000 mm
DCMCT47U6010.0X-T	Micro DC 47U Width: 600 mm, Depth: 1000 mm
DCMCT24U6011.0X-T	Micro DC 24U Width: 600 mm, Depth: 1100 mm
DCMCT36U6011.0X-T	Micro DC 36U Width: 600 mm, Depth: 1100 mm
DCMCT42U6011.0X-T	Micro DC 42U Width: 600 mm, Depth: 1100 mm
DCMCT47U6011.0X-T	Micro DC 47U Width: 600 mm, Depth: 1100 mm
DCMCT24U6012.0X-T	Micro DC 24U Width: 600 mm, Depth: 1200 mm
DCMCT36U6012.0X-T	Micro DC 36U Width: 600 mm, Depth: 1200 mm
DCMCT42U6012.0X-T	Micro DC 42U Width: 600 mm, Depth: 1200 mm
DCMCT47U6012.0X-T	Micro DC 47U Width: 600 mm, Depth: 1200 mm
DCMCT24U8010.0X-T	Micro DC 24U Width: 800 mm, Depth: 1000 mm
DCMCT36U8010.0X-T	Micro DC 36U Width: 800 mm, Depth: 1000 mm
DCMCT42U8010.0X-T	Micro DC 42U Width: 800 mm, Depth: 1000 mm
DCMCT47U8010.0X-T	Micro DC 47U Width: 800 mm, Depth: 1000 mm
DCMCT24U8011.0X-T	Micro DC 24U Width: 800 mm, Depth: 1100 mm
DCMCT36U8011.0X-T	Micro DC 36U Width: 800 mm, Depth: 1100 mm
DCMCT42U8011.0X-T	Micro DC 42U Width: 800 mm, Depth: 1100 mm
DCMCT47U8011.0X-T	Micro DC 47U Width: 800 mm, Depth: 1100 mm
DCMCT24U8012.0X-T	Micro DC 24U Width: 800 mm, Depth: 1200 mm
DCMCT36U8012.0X-T	Micro DC 36U Width: 800 mm, Depth: 1200 mm
DCMCT42U8012.0X-T	Micro DC 42U Width: 800 mm, Depth: 1200 mm
DCMCT47U8012.0X-T	Micro DC 47U Width: 800 mm, Depth: 1200 mm

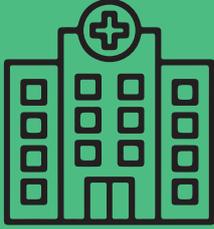X (Color code): 7: RAL 7035 Light Grey, 9: RAL 9005 Black

FROG ENGINEERING

MICRO DC APPLICATION AREAS

Branch offices of financial institutions (Banks, Insurance companies)

Hospital

Small and Medium Size Enterprises (SME's)
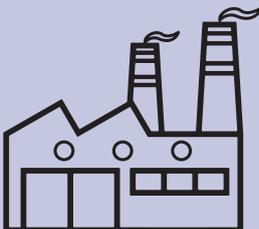
Edge Computing

University
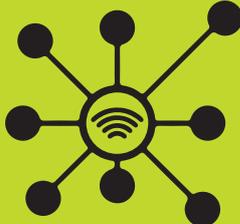
Branch offices of government institutions and utilities

MICRO DC

Warehouse

Factory