



*Leading producer of 19" Rack Cabinets
that organize and protect your IT infrastructure*

MICRO DATA CENTER EDGE CUBE 4.0

Data Processing
in proximity to the
Edge Network for
accelerated connections

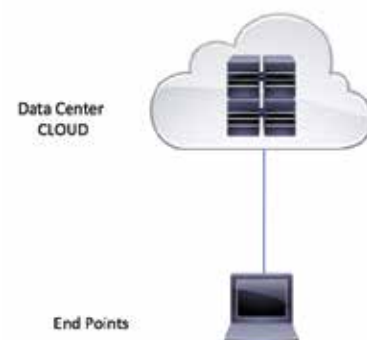


EDGE COMPUTING MICRO DATA CENTER IS THE FUTURE

According to Gartner®, by 2021, 25% of companies will have a Micro Data Center installed. During a research conducted by IDC, 54% of the people interviewed responded that they shall implement EDGE Infrastructure in their company.

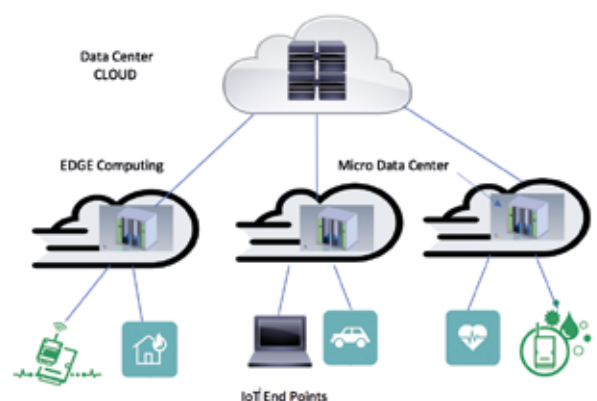
LIMITATIONS OF THE TRADITIONAL MODEL

- Congestion
- Limited bandwidth
- High latency
- Not suitable for latency-sensitive applications (eg. IOT)
- The amount of data is growing faster than bandwidth



ADVANTAGES OF THE FOG COMPUTING MODEL

- Low latency
- Data handling, processing, and delivery are taking place close to the user or the place of origin
- Speed of implementation
- Control of telecommunication costs due to lower bandwidth requirement



MICRO DATA CENTER

EDGE CUBE 4.0

Data and information processing close to the Edge Network to accelerate connections

MICRO DATA CENTER

The growing number of Internet connected devices is pushing IT and Industrial companies to rethink quickly and efficiently their own capacity of data processing. The requirements of IoT demand that such data are handled locally to the end of guaranteeing low latency connections as well as faster and secure data processing.

MDC EDGE CUBE 4.0 is ITRack's solution to realize your MICRO DATA CENTER. It is a modular, autonomous, secure, and mobile system, economically advantageous, consisting of server racks with Data Center functionality and include: Cooling Systems, UPS, Smart PDU, automatic access monitoring and control.

WHAT IS EDGE COMPUTING

Edge Computing is an open and distributed Architecture with decentralized processing power, allowing the processing of data produced by Internet of Things (IoT) devices, at the point closest to that where data is created, instead of sending them over long paths to a Data Center or Cloud. By running the computation in proximity to the network, organizations can attain analysis of large amount of data in almost real-time thus being able to respond to the actual demands of many organizations operating in multiple sectors, such as production, healthcare, telecoms and finance.



FEATURES

MDC EDGE CUBE 4.0 is available in IP20 or IP55 protection grades. The Rack Server integrates an intelligent cooling system and in each of the four available versions can include UPS units, Smart PDU, access control system and monitoring software.



INRACK COOLER HD

- Installation in 19" rack / 7 RU
- Power 3.6kW up to 7.3 kW
- Low noise level at 57dB(A)
- 24x7 operation
- R410A refrigerant
- Includes external condenser



UPS

- Continuity of conditioning and monitoring
- 0.9 power factor
- Reduced management costs
- Low noise levels at 40dB(A)
- High reliability of batteries



MONITORING

- Data storage on-premise or Cloud
- Temperature and humidity
- Conditioning (set Point, On/Off, Alarm)
- PDU (kW/h) and UPS (battery alarm)
- Door handle (open/locked status)



PDU

- IP Metered (Amps, Volts, Watts & kW/h)
- 32A PDU
- Sockets: 24 x C13 + 4 x C19



ACCESS CONTROL

- Integrated LED signalling access to the handle
- Remote monitoring of the handle
- Emergency opening with key in case of power shortage
- Automatic system for door opening in case of alarm



ADVANTAGES

MDC EDGE CUBE 4.0 is essential wherever there's data processing requirement with low latency connection and/or need for higher bandwidth.



REDUCED CAPEX

Investment and construction costs are significantly lower than these for a classic Data Center. Minor implementation costs.



MONITORING

Immediate visualization of reports and graphics in on-premise or Cloud modes with notification of alarms via e-mail and/or SMS.



SECURITY

Access control with automatic door-opening system in case of temperature surge.



REDUCED OPEX

The increase in energy efficiency is reducing drastically costs for cooling and power supply.



INSTALLATION

Fast and simple plug-and-play installation, wherever data processing is required, in building interiors or industrial spaces.



LOW TOTAL COST OF OWNERSHIP

It is not necessary to cool the whole IT area; the cooling unit is integrated in the rack and implementation time is shorter.

MARKETS



Industry 4.0



Oil & Gas



Telecoms & Media



Smart City & IoT



Retail &
Remote Offices



Data Center



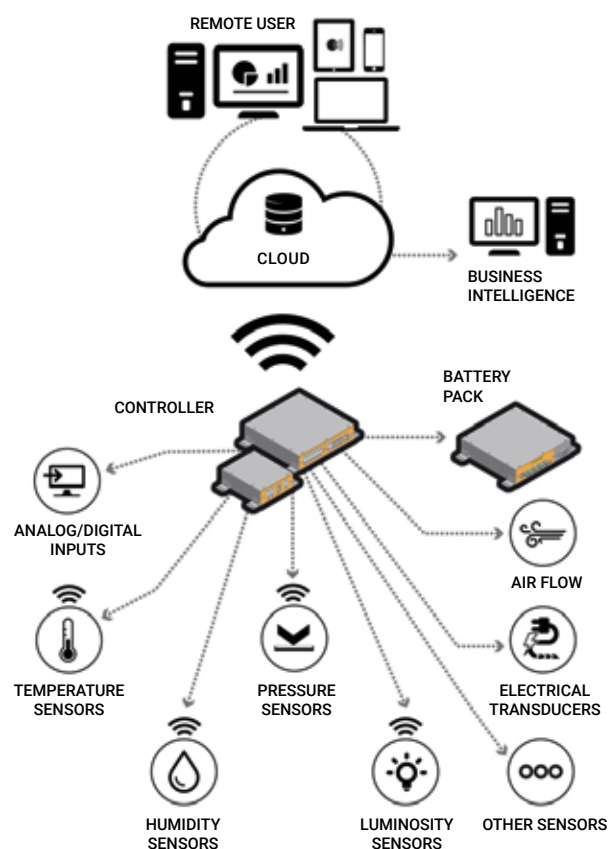
Hospitality



Health Care

MONITORING SYSTEM ARCHITECTURE

- 1| **WEB INTERFACE** to manage and control from a single location the efficiency and status of the geographically dispersed devices.
- 2| **CLOUD INFRASTRUCTURE**, international, dedicated and redundant for each customer.
- 3| **CRYPTOGRAPHY** of data and communications to and from the devices.
- 4| **CONTROLLER** to integrate in one single location the environmental data, energy and production as collected by the sensors and third-party instruments.
- 5| **AVAILABLE ON-PREMISE & CLOUD**, adaptable to the demands and characteristics of the installation to be monitored.
- 6| **ANALOG & DIGITAL SENSORS** of the latest generation with wire or wireless connection.
- 7| **MONITORING SYSTEM** collecting environmental variables of different types, analog & digital inputs, transducers of energy & environmental data, and wireless sensors.



WEB INTERFACE FUNCTIONALITY

- Sensor configuration and reading intervals
- Configuration of users for access hierarchies and levels
- Definition of alarm thresholds and related modes of communication
- Creation of synoptic maps to localized connected sensors and verify their status
- Graphical visualization of data collected
- Intuitive graphic generator for creation and management of the rules associated to the data collected
- Export of data to manage via business intelligence software and report creation

MODELS AND VERSIONS AVAILABLE

Dimensions and configurations other than those contained in the table below, can be available on request.

		EDGE CUBE 4.0 IP20	EDGE CUBE 4.0 IP55	EDGE CUBE 4.0 IP20 Enterprise	EDGE CUBE 4.0 IP55 Enterprise
19" Rack Cabinet	Part Number	EC-IP20	EC-IP55	EC-IP20- E	EC-IP55-E
	Dimensions (HxWxD)	42U 800x1000	42U 800x1000	42U 800x1000	42U 800x1000
	Protection Grade	IP20	IP55	IP20	IP55
	Front door	Glass	Glass	Glass	Glass
	Rear door	Blind / solid	Blind / solid	Blind / solid	Blind / solid
	Available Rack Units	35U	35U	33U	33U
	Volume	0.80 m2	0.80 m2	0.80 m2	0.80 m2
	Colour	Black, RAL 9005	Grey, RAL 7035	Black, RAL 9005	Grey, RAL 7035
Internal Cooling Unit	Installation	19" Rack / 7U	19" Rack / 7U	19" Rack / 7U	19" Rack / 7U
	Cooling power	3.6 kW	3.6 kW	3.6 kW	3.6 kW
	Evaporated Air Capacity	915 m3/h	915 m3/h	915 m3/h	915 m3/h
	Noise	57 dB(A)	57 dB(A)	57 dB(A)	57 dB(A)
External Condenser	Installation	External	External	External	External
	Total absorbed power	1.1 kW	1.1 kW	1.1 kW	1.1 kW
	Total absorbed current	4.7 A	4.7 A	4.7 A	4.7 A
	Coolant	R410A	R410A	R410A	R410A
	Noise	42 dB(A)	42 dB(A)	42 dB(A)	42 dB(A)
PDU	Type	1 x PDU Basic 20xC13 + 4xC19, 3m cable, plug CEE 32A	1 x PDU Basic 20xC13 + 4xC19, 3m cable, plug CEE 32A	1 x PDU Metered 20xC13 + 4xC19, 3m cable, plug CEE 32A	1 x PDU Metered 20xC13 + 4xC19, 3m cable, plug CEE 32A
	Installation	Zero U (mounted on the rear side of the rack)	Zero U (mounted on the rear side of the rack)	Zero U (mounted on the rear side of the rack)	Zero U (mounted on the rear side of the rack)
UPS	Type	N/A	N/A	1x3kVA Online UPS (Conditioning and Monitoring)	1 x 3kVA Online UPS (Condizionamento e Monitoraggio)
	Max Nominal Power	N/A	N/A	3kVA	3kVA
	Max Nominal Power	N/A	N/A	0.9	0.9
	Nominal Tension	N/A	N/A	220-230-240 Vac	220-230-240 Vac
	Nominal Frequency	N/A	N/A	50/60 Hz ±5Hz	50/60 Hz ±5Hz
	Installation	N/A	N/A	19" Rack / 2U	19" Rack / 2U
Monitoring	Installation	N/A	N/A	Zero U (mounted inside the rack)	Zero U (mounted inside the rack)
	Languages supported	N/A	N/A	English - Italian	English - Italian
	Temperature/ Humidity Sensor	N/A	N/A	Yes	Yes
	Handle	N/A	N/A	Open & Closed status	Open & Closed status
	UPS	N/A	N/A	Battery residual capacity – battery residual time	Battery residual capacity – battery residual time
	PDU	N/A	N/A	Amps – Volts – Watts & kW/h Battery	Amps – Volts – Watts & kW/h Battery
	Cooling Unit	N/A	N/A	Set Point – On/Off - Alarm	Set Point – On/Off - Alarm



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