EDGE-5

MANAGED AIR CONDITIONED MICRO DATA CENTRE

Distribution

PRODUCT OVERVIEW

Why EDGE Compute?

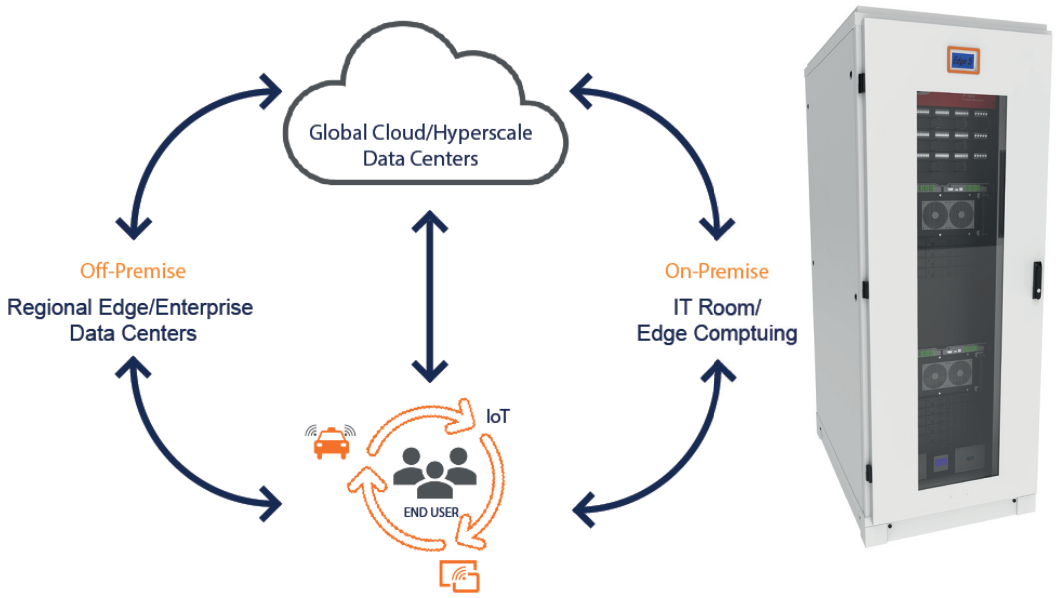
In our digital age more devices are connected to the internet utilising cloud based storage.

The number of devices and users continue to increase which puts a strain on bandwidth causing latency.

The reduction in user bandwidth availability and the increase in latency could have dire consequences depending upon the application being used.
This latency and decrease in bandwidth can be overcome by introducing on-premise edge computing.

This allows the user to access immediate computer power locally whilst using the cloud simply to store information.

This can be done in an environment other than a traditional data room thereby saving real estate and comms/data room build expense. EDP Europe offer a broad range of self contained intelligent modular systems, from USystems, called EDGE to house localised computing, which can be deployed directly into factories, warehouses, offices, M2M, multiple users, businesses etc., either as a standalone cabinet or bayed together in a dedicated room.



Rapid deployment Micro Data Centre

The EDGE range is fully factory configured to enable rapid deployment and has models to suit most applications and environments.

One of these being the EDGE-5, specifically designed for housing localised computing and network equipment in a standalone cabinet in a dedicated room. It is a self-contained air-conditioned Micro Data Centre which is therefore an ideal solution for projects requiring active cooling without the use of external plant.

The 2.5kW air-conditioning system is inverter driven and will maintain the required internal cabinet temperature even when sited in a room ambient of 35°C/95°F.

Peace of mind is provided by an on board environmental and optional security monitoring system. Real time alarms and alerts which can be viewed via the WebUI will notify authorised personnel via email alarms relating to any issues with the cabinet.

Meaning you know what's going on and can monitor who's coming and going 24/7.

Advanced configurations are available for enhanced levels of security and redundancy. The LCD touch display on the cabinet doors will change colour if the cabinet status changes, alerts (amber) or alarm (red). It will remain blue when working correctly. Touching the display will show environmental data from each temperature/humidity sensors or in the event of an alarm what that alarm specifically is.

Typical application spaces:

- Unstaffed offices
- IT/Comms rooms
- Stadium
- Warehouses
- Factories

For safe running we recommend siting in a ventilated room up to 90°F/35°C

Features & Benefits

Security Camera (optional upgrade)
Captures video and images automatically when the door opens

EDGE Management System (EMS)
Providing real time environmental monitoring

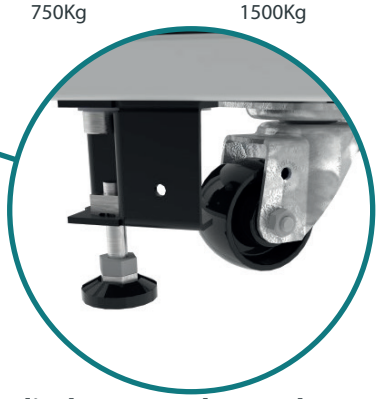
Up To 2.5kW Cooling performance

Cooling capacity
From 500w to 2.5kW per cabinet

Cable Tray
Ensure best cabling practice

Dynamic load 750Kg

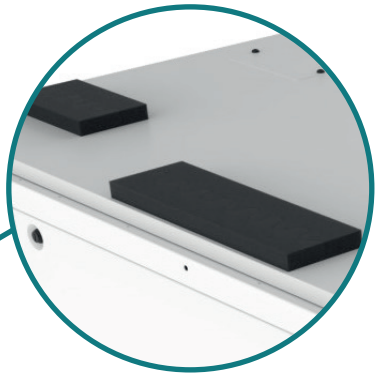
Static load 1500Kg



Plinth corners, heavy duty castors and levelling feet
For safe rapid deployment

Features & Benefits

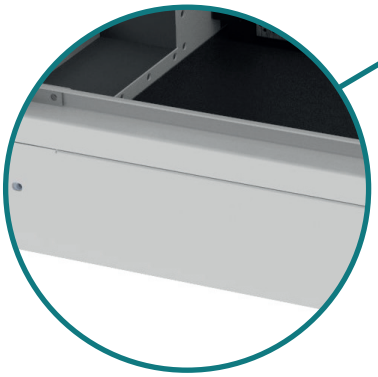
LCD Display
Displaying alarm state and major monitoring points



Cable Entry Glands
Allows for easy and flexible cable egress through the rack top

Clear Glass Door
Keep an eye on equipment without the need to open the door

Air Conditioning Unit
Slim-line and minimal maintenance



Plinth Panels
For that finishing touch

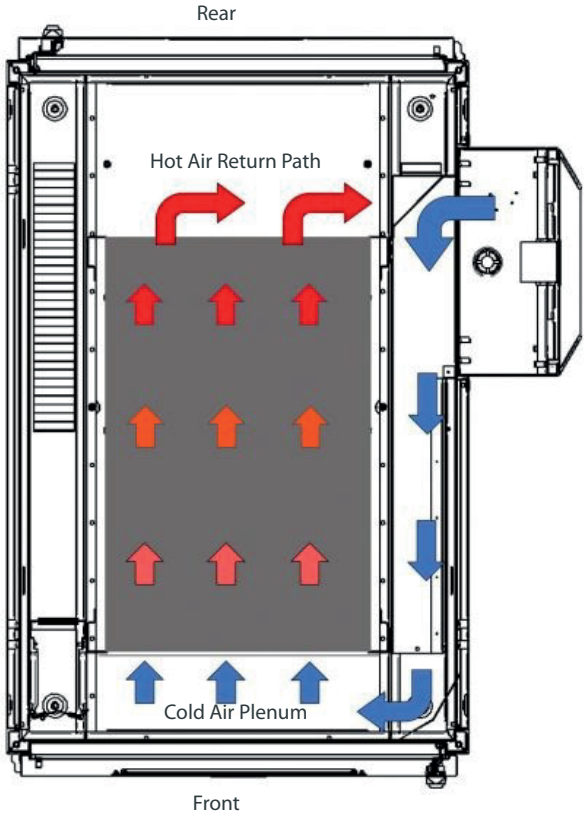
Swing handle and four point locking
Providing high security - electronic upgrade is also available

How it works

The EDGE 5 provides a safe constant working temperature and will deal with a working load of between 500w to 2.5kW to protect and prolong the life of your IT equipment. The EDGE 5 is an ideal solution for reducing energy costs and keeping temperatures controlled inside the cabinet.

The slim-line air-conditioning unit will speed up and slow down as and when the heat load dictates, removing the need for unnecessary over use of the equipment.

The AC unit delivers a constant stream of cold air to the front of the cabinet. The returning hot exhaust air is then pulled over a heat exchanger before continuing through a dedicated channel back to the front of the cabinet.



Specifications

Cabinet Usable Height	36U	42U
Overall height including plinth and levelling feet	78.31"/1989mm	88.8"/2255mm
Width	31.5"/800mm	
Depth	47.24"/1200mm	
Maximum static load capacity on plinth & adjustable feet	3307lbs/1500kg	
Dynamic load*	1654lbs/750kg	

*Dynamic Load Rating is the total rolling mass of the rack and includes the rack frame, cladding and any fitted equipment and accessories and is subject to the load being evenly distributed at 20U height and below. Dynamic load relates to the movement of a rack within the same data centre on a smooth floor clear of any obstacles. Not suitable for transportation on a vehicle when loaded to this weight.

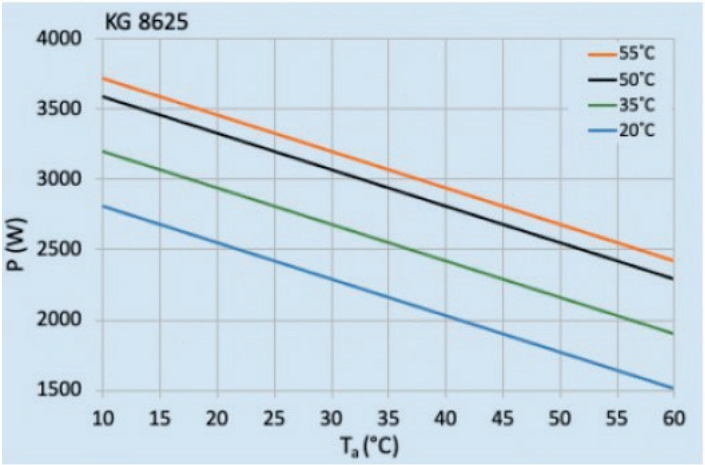
Materials and finish

- **Frame** - 1.5mm CR4 steel
- **Glass door**
  - 1.0mm, 1.2 & 2.0mm CR4 steel
  - 4mm clear toughened glass
- **Side panels** - 1.2mm CR4 steel
- **Top cover** - 1.2mm CR4 steel
- **Mounting angles** - 2.0mm CR4 steel
- **Cooling** - 2.5kW slimline air conditioning unit
- **Intelligence** - Edge Management System
- **Semi gloss powder coat**
  - Light grey RAL 7035
  - Black RAL 9005 (Optional on extended lead)
  - Orange RAL 2009 (Accents only)

Compliance statement: Manufactured to IEC 602973 and EIA STD 310 for panels and racks housing electronic equipment

Specifications

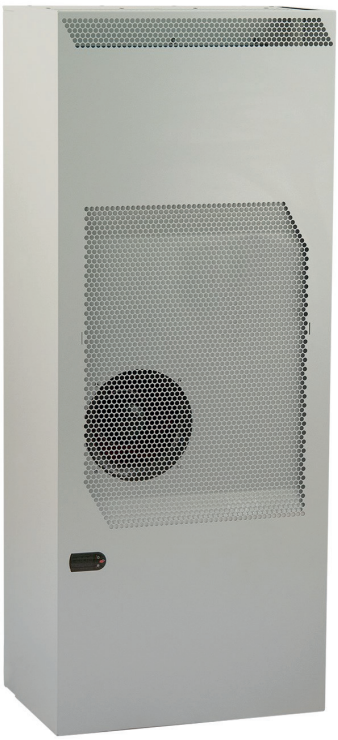
Air Conditioning Unit									
Capacity options (35°C room and 35°C cabinet temperature)	R134a Refrigerant charge	Operating range	Unit weight	Power supply	Starting Current	Max Running Current A (50Hz)	Fuse	Max power	Air volume ambient / cabinet
2.55kW inverter driven system	368g	10° to 60°C 50° to 140°F	45 Kg 99 lbs	240V 50~60 Hz	8A	6.8A	10A (T)	1.55kW	680/ 500m³/h



Variable cooling capacity 500 W - 2.55 kW

Compressor: BLDC Rotary Piston
Refrigerant / GWP: R134a / 1430
Refrigerant charge: 368 g / 13 oz.
High / low pressure: 32 / 6 bar 464 / 87 psig
Temperature range: +10°C - +60°C
Air volume flow (system / unimpeded): Ambient air
Circuit: 680 m³/h / 1000 m³/h
Cabinet air circuit: 500 m³/h

Minimum cooling capacity 500w



Rear View

Front View

EDGE Management System EMS

Providing complete peace of mind

A standard feature of the EDGE-5 is the inclusion of the Edge Management System EMS controlling the environmental status of the cabinet with up to 4 temperature and humidity reporting and alarming if over threshold is reached.

Additional contact sensors to notify of door access. Displayed on a easy to view Webui with SNMP trap send, V1, 2 and 3 available to send out data and alarms.

Because you need to know

Whilst it is the EMS which takes care of the energy efficient cooling, it is also the EMS which brings together the whole solution.

Alarms and alerts in real time will notify you of any issues with your cabinet. The LCD screen on the cabinet will also show an alarm status, touch will provide sensor data, fan status and contact sensor triggers.

Front View

Front View

Rear View

EDGE Pack Options

Intelligent power

A full suite of fully specified intelligent power strips in a variety of entry levels

Security

A full electronic access and security system, key pad, bio metric etc.

Uninterruptible power supplies

Protection for hardware from unexpected power disruption

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