

Considerations for Edge

Find out how we can help you deploy your edge

ZELLA DC™
#MakingEdgeEasy



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Is there a constraint for deployment location?

Indoor environment

Our [Zella Pro](#) can be placed anywhere:

- It's an all in one solution that doesn't require a purpose built room
- It's quiet, so it can be placed in a meeting room, a reception, or next to a desk
- It's water proof so it can be placed under water sprinklers
- It's aesthetically pleasing so it doesn't have to be hidden away



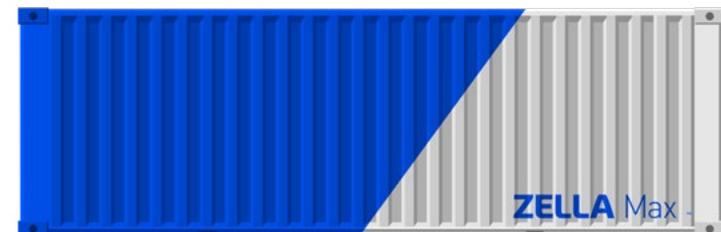
Outdoor environment

If you don't have the infrastructure to place your micro data centre in a sheltered environment, we have outdoor options.

Available as a Pro 12, Pro 25 and Pro 38, the [Zella Hut](#) has all the same features as the Zella Pro, with the added benefit that it can be placed outdoor.

Alternatively, you may want to consider our containerised solution, Zella Max. The [Zella Max](#) is appropriate for both greenfield and brownfield construction sites. The 20ft containerized solution features single and dual-cooling system perfect for storing your Zella Pros.

Both solutions are perfect for telecom infrastructure, [mine sites](#), remote locations, smart farms, etc.





How much space do you have allocated?

Our micro data centres are very compact. They don't need a purpose built room and they take up a very small footprint. They are similar in size to a fridge or a vending machine.

This means they can be placed virtually anywhere, like:

- in an office by your desk
- in a warehouse
- in a shop
- in a basement
- in a meeting room
- in a reception area
- in a shed or a hut
- by your vending machines
- by shelves

Most of our models also fit through standard size doors.





Is there a requirement for specialist installers?

Installation of our micro data centres is fast and easy and you won't need any specialist IT personnel.

All you have to do is call your trusted electrician and a qualified air conditioning technician. The whole process only takes a few hours.

All manuals, terms of use and guides you need are available online via the QR Code you will find on your Zella DC (a hard copy is also included within the unit).

Once the micro data centre has been installed, you can call your IT specialist to install your servers or any other 19" rack mounted equipment you may need.



Considerations for Edge | Rack mounted equipment



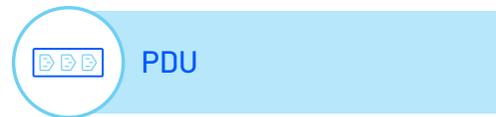
What IT equipment do you plan to deploy?

Zella DC's are versatile and can accommodate any rack mounted equipment.

The Zella DC solution



Fire Protection



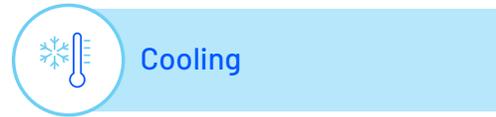
PDU



Physical Security



Switchboard
and UPS / Batteries



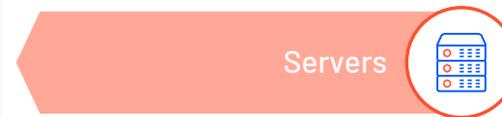
Cooling



What you can add



Any 19" Rack
mounted equipment



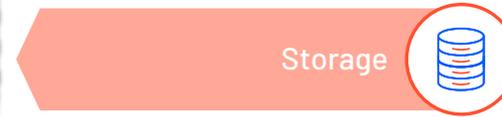
Servers



UPS / Batteries



Communications



Storage

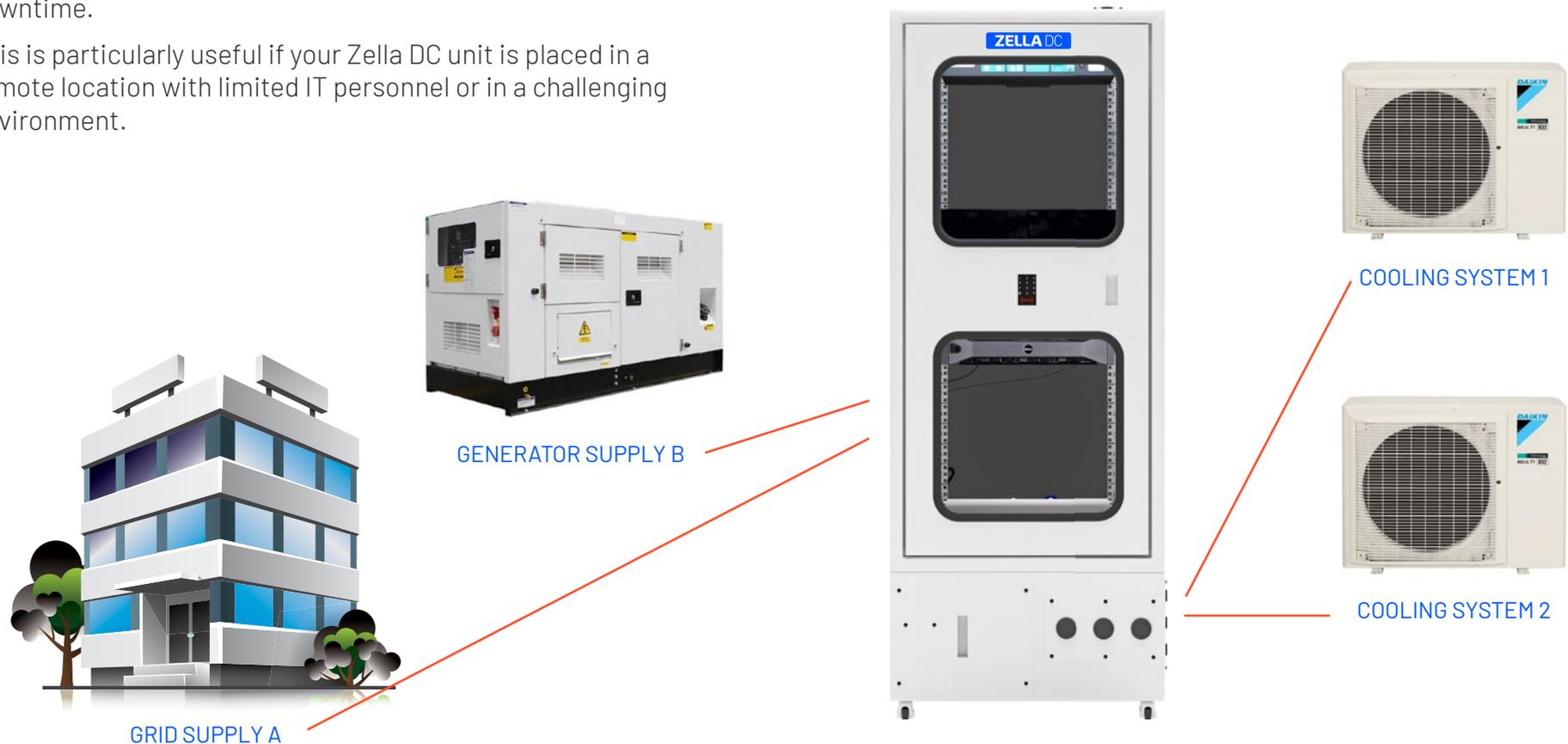
Considerations for Edge | Redundancy



Do you need redundancy in the unlikely event of DC equipment failure?

Our products are extremely reliable, however, redundant cooling and power options are available for all Zella DC models for peace of mind and to help you minimise your downtime.

This is particularly useful if your Zella DC unit is placed in a remote location with limited IT personnel or in a challenging environment.





Is cyber security a consideration?

All Zella DC micro data centres come standard with military grade cyber security features.

Our Zella DC units will protect you from cyber threats:

- Encryptions. We only enable secure encrypted communication by default (HTTPS and SSH). We use the strongest encryption in the industry.
- Password policies. Password expiration ensures passwords getting refreshed periodically, preventing hackers from accessing the Zella DC from any known security breaches.
- Firewalls. IP-Based Access control Lists (IP ACL) and Role-Based Access Control (RBAC)
- Defences in Depth. Blocking access after repeated failed login, timing out inactive sessions, limiting use of same login, restricted service agreement warnings.
- Certificates. CA Certificates and Self-Signed Certificates.

[Find out more](#)



Considerations for Edge | Physical Security



Is physical security important?

Zella DC provides enhanced security through a range of basic and sophisticated physical access controls, which can be activated remotely.

- Keypad/card and PDView access control (standard)
- Vandal proof and waterproof
- IP based biometric access with proximity card (fingerprint/card)
- Ethernet interface for TCP/IP communication
- Mag locks front and rear door
- Remote door access

Occurred At	Severity	Event	Summary	Target	Status
09/13/21, 10:58:29 AM	INFORMATIONAL	Door open	Door "Zella HQ Front Door" is open	Zella HQ Front Door	Cleared by system event
09/13/21, 10:58:27 AM	CRITICAL	Contact sensor alarm	Contact sensor "Office Door", has been tripped to the Alarm state	Office Door	Cleared by system event
09/13/21, 10:58:05 AM	INFORMATIONAL	Door open	Door "Zella HQ Front Door" is open	Zella HQ Front Door	Cleared by system event
09/13/21, 10:58:03 AM	CRITICAL	Contact sensor alarm	Contact sensor "Office Door", has been tripped to the Alarm state	Office Door	Cleared by system event
09/13/21, 10:57:40 AM	INFORMATIONAL	Door open	Door "Zella HQ Front Door" is open	Zella HQ Front Door	Cleared by system event
09/13/21, 10:57:38 AM	CRITICAL	Contact sensor alarm	Contact sensor "Office Door", has been tripped to the Alarm state	Office Door	Cleared by system event
09/13/21, 09:22:19 AM	INFORMATIONAL	Door open	Door "Zella HQ Front Door" is open	Zella HQ Front Door	Cleared by system event
09/13/21, 09:22:16 AM	CRITICAL	Contact sensor alarm	Contact sensor "Office Door", has been tripped to the Alarm state	Office Door	Cleared by system event
09/13/21, 08:48:01 AM	INFORMATIONAL	Door open	Door "Zella HQ Front Door" is open	Zella HQ Front Door	Cleared by system event
09/13/21, 08:47:54 AM	CRITICAL	Contact sensor alarm	Contact sensor "Office Door", has been tripped to the Alarm state	Office Door	Cleared by system event
09/13/21, 08:42:16 AM	INFORMATIONAL	Door open	Door "Zella HQ Front Door" is open	Zella HQ Front Door	Cleared by system event
09/13/21, 08:42:14 AM	CRITICAL	Contact sensor alarm	Contact sensor "Office Door", has been tripped to the Alarm state	Office Door	Cleared by system event
09/13/21, 08:30:13 AM	INFORMATIONAL	Door open	Door "Zella HQ Front Door" is open	Zella HQ Front Door	Cleared by system event

REMOTE ACCESS MONITORING



KEYPAD

ZELLA DC DEMO HQ	
ZELLA DC DEMO HQ (1) REMOTE DOOR ACCESS	
Details	
Peripheral device ID	11
Position	Port 1, Chain position 2
Serial number	QU70C00016
Type	Contact Closure (On/Off)
Sensor	
State	normal
Last time changed	13/09/2021, 11:16:24 UTC+0800
Settings	
Name	REMOTE DOOR ACCESS
Description	TO OPEN DOORS - TURN ON
Location (X)	
Location (Y)	
Location (Z: Rack Units)	

REMOTE DOOR ACCESS



How will you manage your infrastructure?

Easy to manage and monitor all your MDCs no matter how many you have and no matter where they are located in they world from one single location thanks to the Raritan® power distribution unit (PDU).

Raritan are leaders in supplying reliable power-related products for IT infrastructure. Their [intelligent PDU](#) is capable of:

- Monitoring power usage
- Environmental monitoring
- Power capacity planning
- Advanced security
- Remote management
- Built-in failover

Through the Power IQ user interface, you can view, manage and report on power consumption, running costs and related trends. You also have the ability to measure the PUE (Power Usage Effectiveness) so you can plan future optimisation and expansion.





Will you need fire protection?

All our micro data centres come with a rack-mounted Pyrorack fire protection system.

The Pyrorack is already installed in all the Zella Pro and ready to use. It's located at the top of the unit where it continuously checks the air quality. Hot air and smoke tend to rise so by placing the system at the top you will be sure any issue will be detected quickly.

The Pyrorack has a two sensor system: when the sensors detect smoke the alarm will sound for 30 seconds and the Pyrogen gas will be damped within a millisecond of detection. The gas kills the oxygen, and therefore the fire, in a matter of seconds as the Zella Pro is fully sealed.

If a fire is detected, a priority one alarm will immediately be sent to the environmental monitoring, so you will be promptly alerted of the issue no matter where you are located.

If the fire comes back, the gas works for up to an hour - this is particularly handy if your Zella Pro is located in a remote location and you can't get there quickly to investigate the situation.

The Pyrorack will work even in case of a power cut as it has its own power source. In the unlikely event the power cut is prolonged and the Pyrorack's battery runs out, there are two built-in failed safety redundancy features.

When the heat sensing cord under the Pyrorack burns or reaches 175°C it automatically release the gas. If the cord is missing, the pyrogen canister will self-operate when it reaches 500°C.

The Pyrorack has one more security feature. If you need to temporarily deactivate it for maintenance reasons, a sound will play every 20 seconds to remind you to switch it back on. Deactivation will also trigger an alert on the environmental monitoring.

Pyrogen is not only safe to use around IT equipment (so it won't cause any damage to your data) but it's also safe for humans and for the environment.

[Find out more](#)





Will you need more capacity in the future?

Our Zella Pro comes in 3 different sizes, Zella Pro 12, Zella Pro 25 and Zella Pro 38. The Zella Pro is easily scalable and modular so you can easily add more units when required.

The Zella Max also allows you to easily scale and grow with you: you can add more units inside or add more containers.





What maintenance is required?

With our next-generation data centre solutions, expensive and time-consuming maintenance is a thing of the past. With our Zella Pros you eliminate the need for an on-premise server room and simplify the whole process, from installation, to maintenance.

Unlike traditional server rooms, our Zella Pros only need a quick and easy once a year general inspection to monitor the following areas:

- access control
- cooling system
- UPS and environment monitoring
- fire protection (pyrorack)

A complete inspection only takes around 2 hours and can be carried out by any member of your staff by following the provided step-by-step guide - no training needed!

[Find out more](#)





At some point in the future, will you need to move your MDC?

Relocating a server room is a complex and costly process, as you can't simply unplug servers, throw them in the moving truck and plug them in a new location. To relocate your server room, you will need to hire specialists which are experienced with moving such sensitive and complex equipment.

With our range of portable micro data centres, relocating your server room can be as easy as unplug - transport - plug back in. The decommissioning and re-installing of your Zella Pro only takes a couple of hours saving you time and money. Your trusted electrician will be able to connect your Zella Pro to mains power and any qualified air conditioning technician will be able to commission the cooling system.

The Zella Pros are:

- Compact enough to fit through any standard doorway or hallway and take up minimal space.
- Operable on standard power, so can be plugged in anywhere.
- Able to be placed next to one another in a modular fashion or stored in different locations.
- Complete with wheels so you can easily move them around.
- Fully insulated, with a very low noise level so you can put them anywhere.



[Find out more](#)



Is carbon footprint a big consideration for your organisation?

A simple and effective way to reduce your company's carbon footprint (and improve your NABERS rating) is by upgrading to a micro data centre. This all-in-one solution is typically more energy efficient as you reduce the area to be cooled down from a whole room or floor to an area the size of an average refrigerator. But of course not all micro data centres offer the same energy saving measures.

At Zella DC we have developed a range of micro data centres designed to be user friendly, efficient, secure and compact. A Zella Pro will allow you to:

- Reduce the cooled area from an entire room / floor to an area the size of a refrigerator
- Match your cooling and energy efficiencies with your IT load at all times
- Program units to shut down during non-productive times (weekends and holidays)

And with a PUE of 1.2, you will see a massive reduction in your carbon footprint, operational costs and energy bills (calculate your savings).

[Find out more](#)





Is reducing costs a priority?

With a Zella Pro being the size of an average refrigerator, it offers its own cooling and power capabilities, significantly reducing operational and energy costs by 30-60%. The insulation and small air volume also mean that it's incredibly efficient to cool. In fact, office power savings of 70% have been reported. Those energy savings quickly add up.

Our micro data centre also have other cost saving benefits:

- they don't take valuable floorspace in your office - save money on rent or reclaim your server room and turn it into a meeting room
- they are easy to transport and relocate
- they take weeks to build so they will be with you in no time - minimise your downtime
- they are scalable and modular: no need for a large upfront investment - buy what you need now and add more units if and when needed

Find out more [here](#) or calculate how much you can save compared to a traditional server room with our handy [online calculator](#).

