

ZELLA Pro

Micro Data Centres

Technical Specifications (AC powered)



ZELLA DC

Table of contents

Zella Pro Micro Data Centre - benefits and features	3	Buildings chilled water requirements	9
Dimensions and weights	4	Monitoring	10
Your IT spacing guide	5	Access control	11
Switchboard and power	6	Sensors	11
Intelligent PDU	6	Cyber security	11
UPS and battery (optional)	7	Physical security	12
Fire protection (optional)	7	Alarms and automation	13
Cooling system	8	Warranty	13
External condensers specifications	8	Certification	13
Water cooling	9	Our product range - Technical Specifications	14

Zella Pro Micro Data Centre - benefits and features



A Zella Pro is a compact, portable and secure micro data centre that eliminates the need for a traditional on-premise server room.

It's an all-in-one, easy and quick solution that will be with you in a matter of weeks and can be installed in a few hours.

The Zella Pro range has been designed with the edge in mind, built to protect your assets and IT infrastructure no matter where they are located.

Ready to be deployed at the Edge - wherever that may be.

Keep your data and infrastructure **safe and secure** from physical and cyber threats.



Highly energy efficient with a low PUE (power usage effectiveness).



The Zella Pro has a very **small footprint**, similar in size to a fridge or vending machine.



Your data and assets are fully enclosed by a robust **metal enclosure**.



Our smart MDCs are programmed with **alerts & automations** to protect your uptime.



Modular and scalable - buy what you need now and add more as your business grows.



The Zella Pro is fully **insulated** to keep your servers at a stable temperature.



The **secure door** will allow you to have complete control over who has access to your data.



Reduce your carbon emissions by lowering your energy consumption.



Save money by lowering your power bills and simplifying maintenance and installation.



The **self leveling wheels with locking pads** make it easy to move the Zella Pro.



Reach your servers easily thanks to **360 degree access with removable panels**.



With a **quiet and sleek design**, your micro data centre can be placed anywhere.



Manage and monitor your data and infrastructure remotely to protect your uptime.



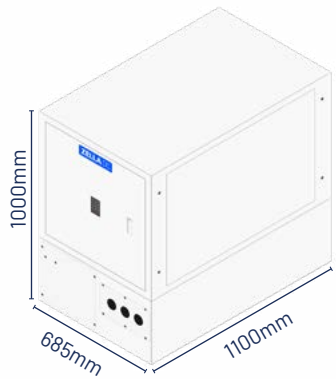
Internal LED bar lights allow you to easily view your IT equipment and servers.



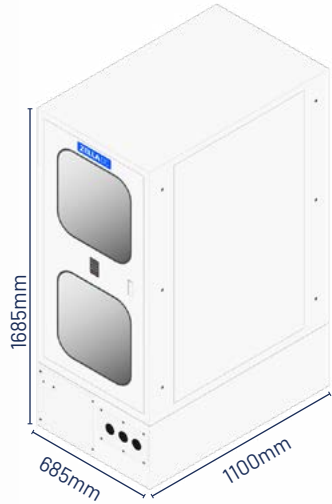
Cable management to facilitate installation and maintenance and for health & safety.



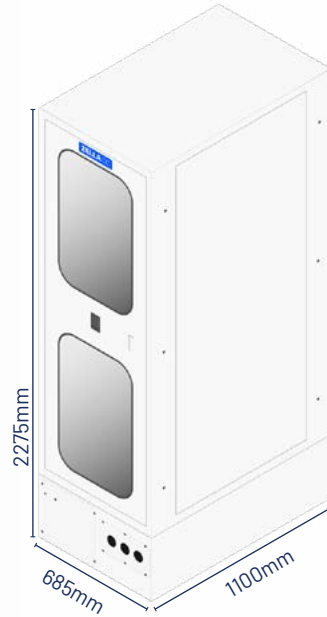
Dimensions and Weights



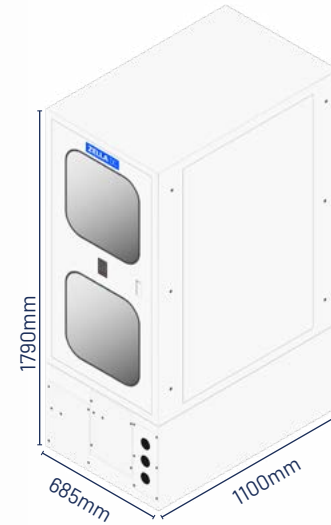
ZELLA Pro 12



ZELLA Pro 25



ZELLA Pro 38



ZELLA Pro 25
Dual Cooling



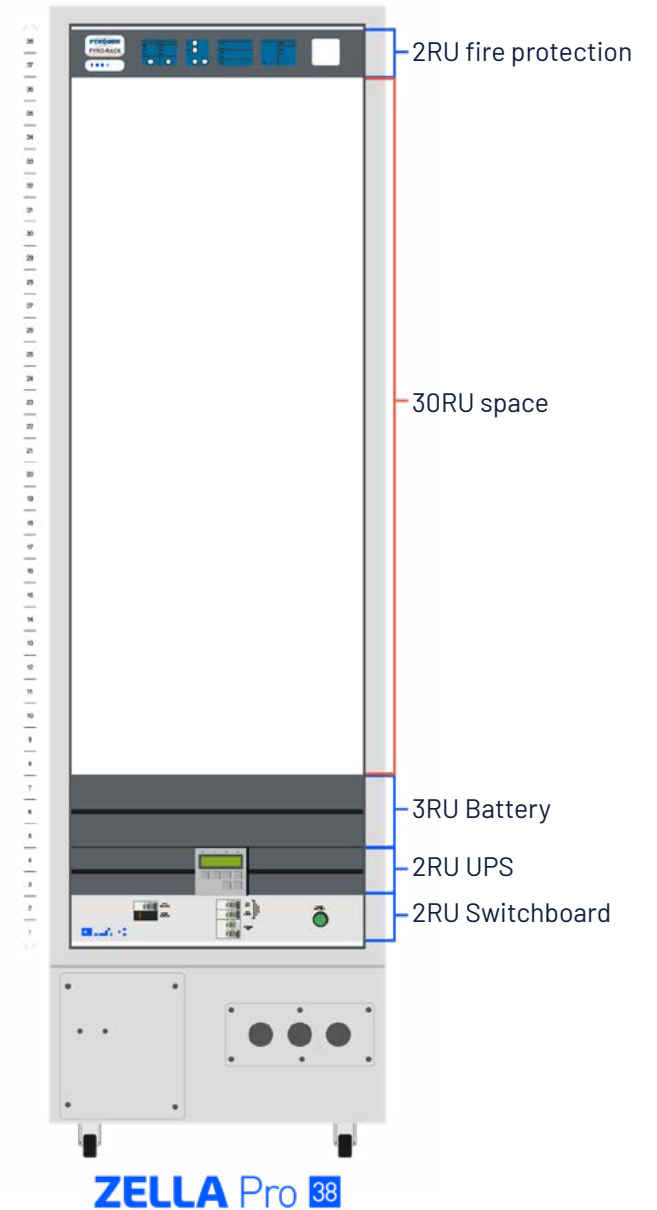
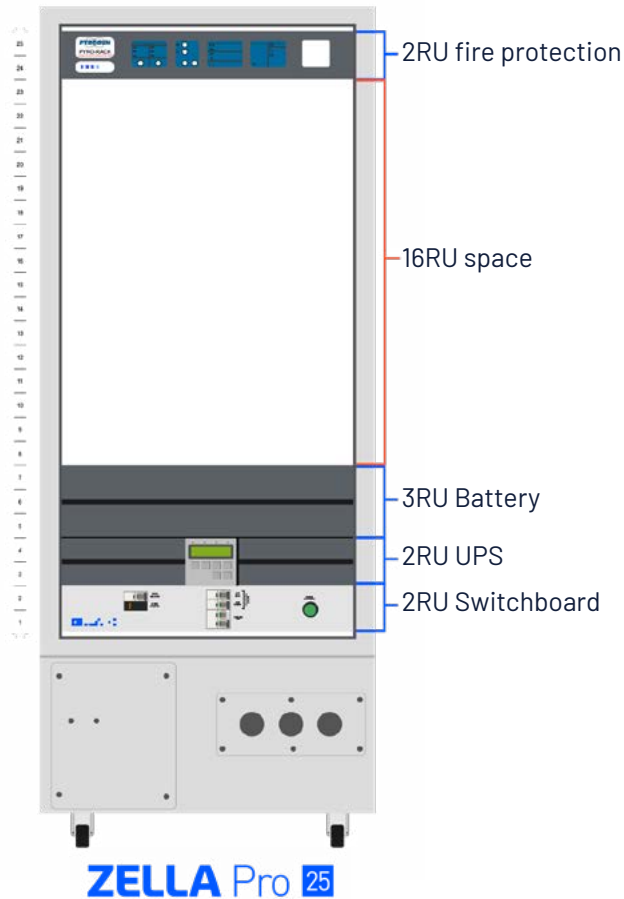
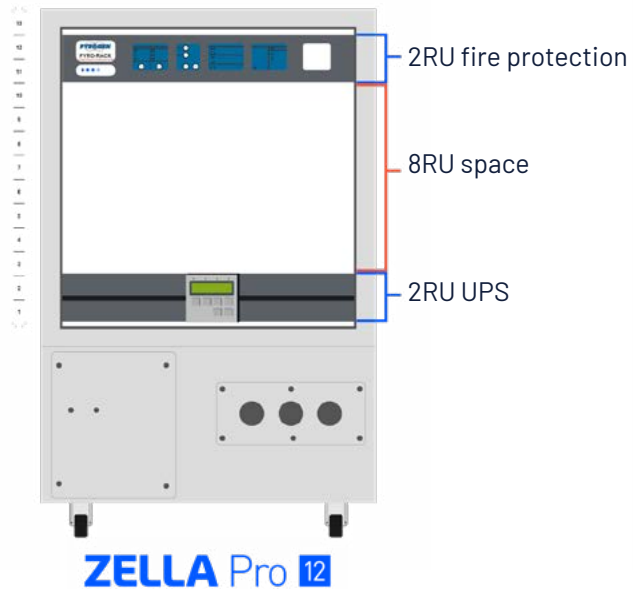
ZELLA Pro 38
Dual Cooling

	Pro 12	Pro 25	Pro 38	Pro 25 - Dual Cooling	Pro 38 - Dual Cooling
Standard dimensions (L x W x H) mm	L1100 x W685* x H1000	L1100 x W685* x H1685	L1100 x W685* x H2275	L1100 x W685* x H1790	L1100 x W685* x H2380
Base weight (approx.)	120kg	225kg	308kg	265kg	348kg
Client available space	12U	23U	36U	23U	36U

*Extra Width (total = 800mm) available for quantities five and above only

Your IT spacing guide

Each Zella Pro includes a rack-mounted switchboard and a 0RU PDU. You also have the option to add a UPS, a battery and a fire protection system. You can use the remaining racks to add any other rack-mounted equipment you may need such as servers, comms equipment, additional batteries, etc.



Switchboard and Power



Pro 12

Standard switchboard

Single Phase 0RU 20 Amp

Standard inclusions

220V TO 240V - 50/60HZ

Easy UPS installation

Surge and RCD protection

Power cable length 5m

Optional upgrades

No switchboard upgrade

Power cable length 10m

Pro 25 | Pro 38

Standard switchboard

Single Phase 2RU 32 Amp

Standard inclusions

220v to 240v - 50/60Hz

Easy UPS installation

Surge and RCD protection

Power cable length 5m

Optional upgrades

Single phase 2RU 63 Amp

Dual Powered 3RU 32 Amp

Power cable length to 10m

Intelligent PDU

PDU features

Energy metering with bill grade accuracy (+/- 1%)

Metering per input line

Metering per output receptacle

Remote outlet switching

Networking

Metering per branch circuit breaker

On board display

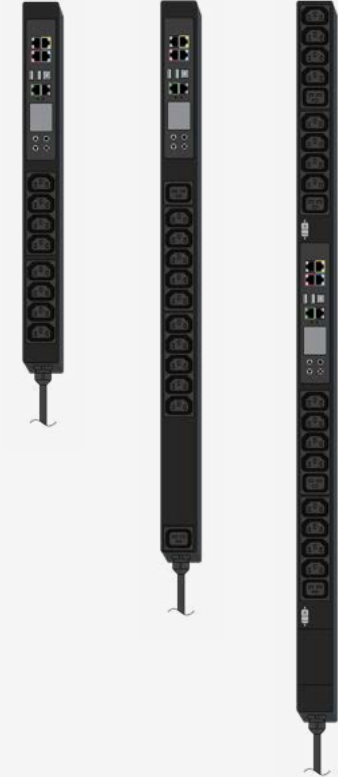
Overload protection

Cable retention

Pro 12

Pro 25

Pro 38



	Pro 12	Pro 25	Pro 38	Pro 25 Dual Cooling	Pro 38 Dual Cooling
Rated Input power (AMPS)	16amps	16amps	32amps	16amps	32amps
C13 - Output connections	8	11	16	11	16
C19 - Output connections	×	1	4	1	4

UPS (Uninterruptible Power Supply) and Batteries

OPTIONAL



Choose our UPS or add your own (vendor agnostic).

When you choose to buy a UPS and battery banks from Zella DC, these are rack mounted, and installed during factory build.

Pro 12

2kVA UPS DAKER Plus (310171)
6 x 12V 7.2AH internal batteries - 2RU
Estimated backup time - 10 minutes

Pro 25 Pro 38

5kVA UPS DAKER Plus (310175) - 2RU
Battery Bank (310669) - 20x12V 9Ah - 3RU
Estimated backup time - 23 minutes

6kVA UPS DAKER Plus (310176) - 2RU
Battery Bank (310669) - 20x12V 9Ah - 3RU
Estimated backup time - 19 minutes

Additional Battery Bank (310669) - 3RU

Fire Protection

OPTIONAL



Rack mounted fire protection (Pyrorack)

Mounted at the top of the Zella Pro

10 year life span

Human friendly, equipment friendly and environmentally friendly

Easy to maintain and replace canister

Monitored

Cooling System

The Zella Pro comes with a single cooling system, with the option to upgrade to a dual system. Dual cooling includes two independent cooling systems which rotate every two weeks.

Pro 12

Single Cooling - Standard

2.5kW (7165 BTU)

Single Cooling - Upgrade

3.5kW (11 942 BTU)

Pro 25

Pro 38

Single Cooling - Standard

5.0kW (17 060 BTU)

Single Cooling - Upgrade

6.0kW (20 472 BTU)

7.1kW (24 226 BTU)

Dual Cooling

Rotation Mode: 5.0kW (17 060 BTU)

Running in Parallel: 10kW (34 120 BTU)

Additional Information

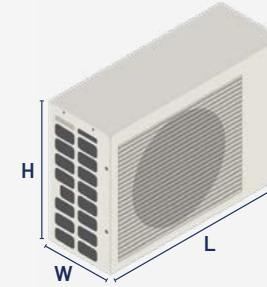
Zella Pro powers the external condensers

All condensers are pre-gassed

Copper piping to suit Zella Pro available in 20m lengths

All wiring provided to connect Zella DC and external condenser

External Condenser Specifications



Condenser size (mm): 550H x 675L x 284W

Gas Type R32

Max pipe length 20m and max level difference 15m

2.5kW (8530 BTU)
Condenser weight (kg): 26
Liquid pipe: 6.4mm
Gas pipe: 9.5mm

3.5kW (11 942 BTU)
Condenser weight (kg): 26
Liquid pipe: 6.4mm
Gas pipe: 9.5mm

Condenser size (mm): 595H x 845L x 300W

Gas Type R32

Max pipe length 30m and max level difference 20m

5kW (17 060 BTU)
Condenser weight (kg): 26
Liquid pipe: 6.4mm
Gas pipe: 9.5mm

6kW (20 472 BTU)
Condenser weight (kg): 26
Liquid pipe: 6.4mm
Gas pipe: 9.5mm

7.1kW (24 226 BTU)
Condenser weight (kg): 26
Liquid pipe: 6.4mm
Gas pipe: 9.5mm

Water Cooling

Water Chilled Cooling - Integrated with building cooling system.

**Subject to approval and design*

Pro 12 | Pro 25

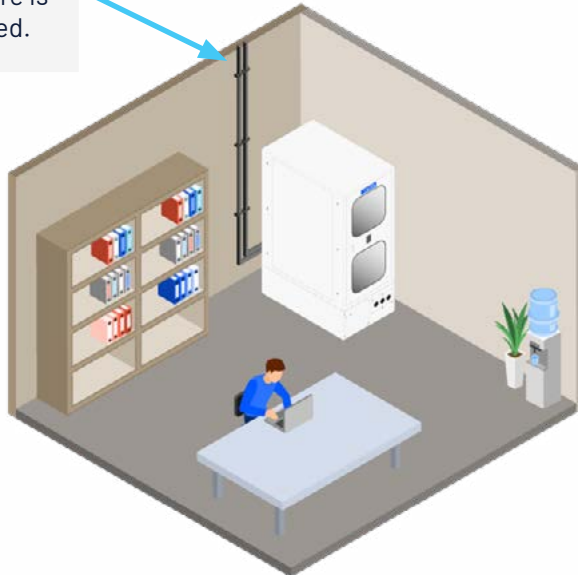
2.6kW (8871 BTU)

3.0kW (10 236 BTU)

Pro 25 | Pro 38

4.5kW (15 354 BTU)

The Zella Pro is plumbed into the building's chilled water so there is no external condenser required.



Building's Chilled Water Requirements

Water Cooling Specifications

2.6kW (8871 BTU)

Zella Pro length required: 1000 depth only

Water flow - l/h: 454

Water pressure drop - kPa: 18

Pipe sizes - gas: 7 degrees

4.5kW (15 354 BTU)

Zella Pro length required: 1200 depth only

Water flow - l/h: 765

Water pressure drop - kPa: 29

Pipe sizes - gas: 7 degrees

3.0kW (10 236 BTU)

Zella Pro length required: 1200 depth only

Water flow - l/h: 530

Water pressure drop - kPa: 22

Pipe sizes - gas: 7 degrees

Monitoring

PDView comes standard with Zella Pro and allows you to quickly gain complete access and control to your Zella Pro straight from your smartphone or laptop. The PDView App allows you to push program updates, set up SNMP traps, pull diagnostic files, test features/functionality, and more.

PDView allows you to manage each micro data centre individually:

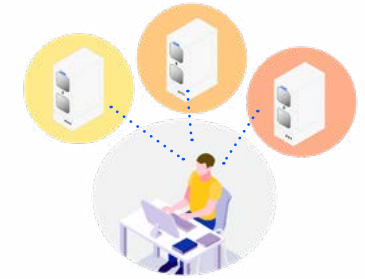
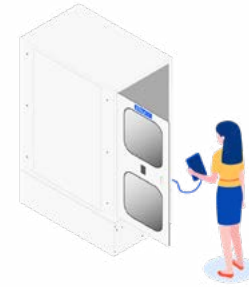
- ✓ Turns your tablet/phone into remote display (iOS & Android)
- ✓ View your critical data via your smart device

If you plan to manage multiple units, we recommend using PowerIQ which allows you to centrally manage and control your distributed micro data centres from a single pane of glass.

Power IQ DCIM Monitoring Software enables IT managers to closely monitor and efficiently utilize their micro data centre power infrastructure. Data center health maps, power analytics, cooling charts, and reports alert you to potential trouble and help you understand real-time power load, trends, and capacity at all levels of infrastructure. A configurable dashboard provides vendor agnostic views of power capacity, environmental health, and energy consumption. Get single-click access to micro data power, cooling, airflow, events, and much more.

Main features include:

- ✓ Environment Monitoring
- ✓ Energy Management
- ✓ Power Management
- ✓ Vendor Agnostic Management



PDView (standard)
Singular - managing one Micro Data Centre
Network independent - no network required
Integrated within Zella Pro
Standard interface
Pre-programmed within Zella Pro - ready for the Edge

Power IQ (optional)
Multiple - intended for managing multiple Micro Data Centres
Network dependent - requires a network
Hosted in the cloud/on premises
Customisable interface
DCIM - ready to receive notifications from your Edge



Access Control

Standard

Security Keypad and one Access Card (Fob) included per Zella Pro.

Optional

Additional access cards

Barrel key lock access

Other security options are available.
Contact [Zella DC](#) for more information.

Sensors

Single cooling - one temperature sensor

Door sensor alarm

Water sensor

Vibration sensor (optional)

Dual cooling - two temperature sensors

Fire and fire fault alarm

Web camera

Proximity sensor (optional)

Cyber Security

Our intelligent micro data centres are equipped with the latest network security protocols, the most diverse options for user authentication and management, and leverage best in class data encryption methods.

Our products are continuously updated in order to provide the safest deployment experience while meeting the increased network security requirements in high-risk environments.

Password policies. Password expiration ensures passwords are refreshed periodically, preventing hackers from accessing the Zella Pro from any known security breaches.



Firewalls. IP-Based Access control Lists (IP ACL) and Role-Based Access Control (RBAC).



Encryptions. We only enable secure encrypted communication by default (HTTPS and SSH). We use the strongest encryption in the industry.



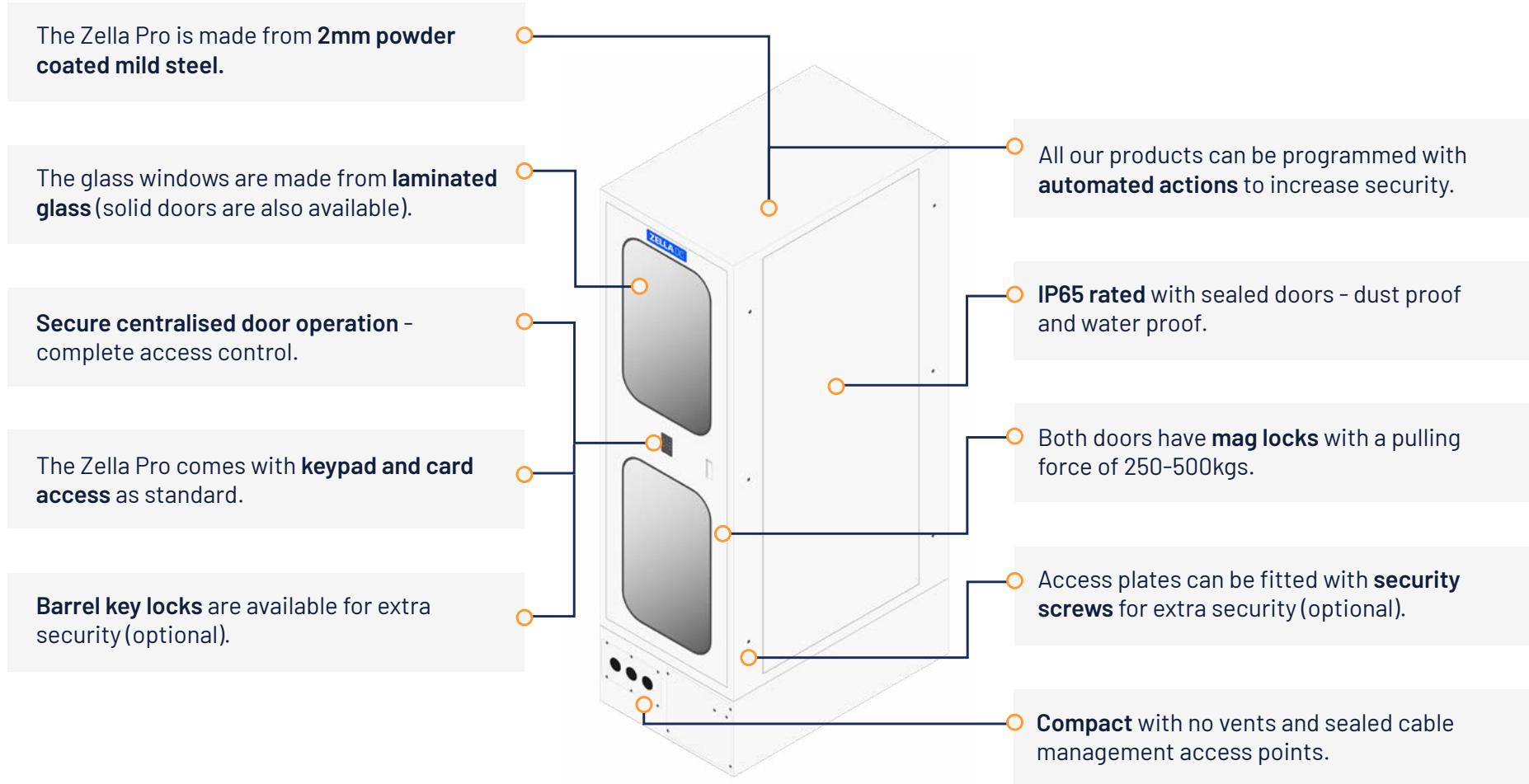
Defences in Depth. Blocking access after repeated failed login, timing out inactive sessions, limiting use of same login, restricted service agreement warnings.



Certificates. CA Certificates and Self-Signed Certificates.



Physical Security



Alarms and Automation

All our products are pre-programmed with a series of automated actions before they leave our warehouse. These automations, that you will be able to further customise to suit your specific needs, are designed to protect your assets and to give you peace of mind.

Loss of Power. In the event of a power cut, the Zella Pro can be programmed to initiate a shut down of non-critical equipment or to turn on a back-up generator.



Temperature fluctuations. When a change in temperature is detected, the Zella Pro can be automated to switch on the spare cooling system, to regulate the temperature or even to open a door.



Physical security breaches. If the unit senses any vibration that suggests someone is tampering with it, not only will this send an alert, but it will also activate the internal camera to capture images.



Full fire control. We've automated this vital function to regularly monitor the system, meaning you will receive an instant notification should there be a problem.



Issues with server reachability. As the Zella Pro continuously pings the servers, if at any time a reply isn't received then an automatic program can be installed that will reboot the server.



Dual cooling. When you have dual cooling, if one cooling system fails, the other one will automatically kick in. The spare cooling system can also switch on in case of a sudden rise in temperature.



Warranty



12 months Zella Care warranty. Applies to all internal electrical and cooling components only.



Extra 2 to 5 years warranty (includes the standard warranty)

Certifications and Ratings

Zella DC Pro Series/Componentry comply with many international standards.

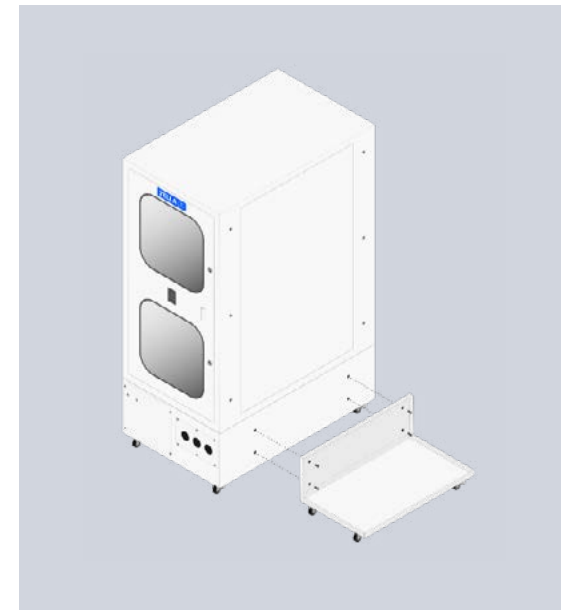
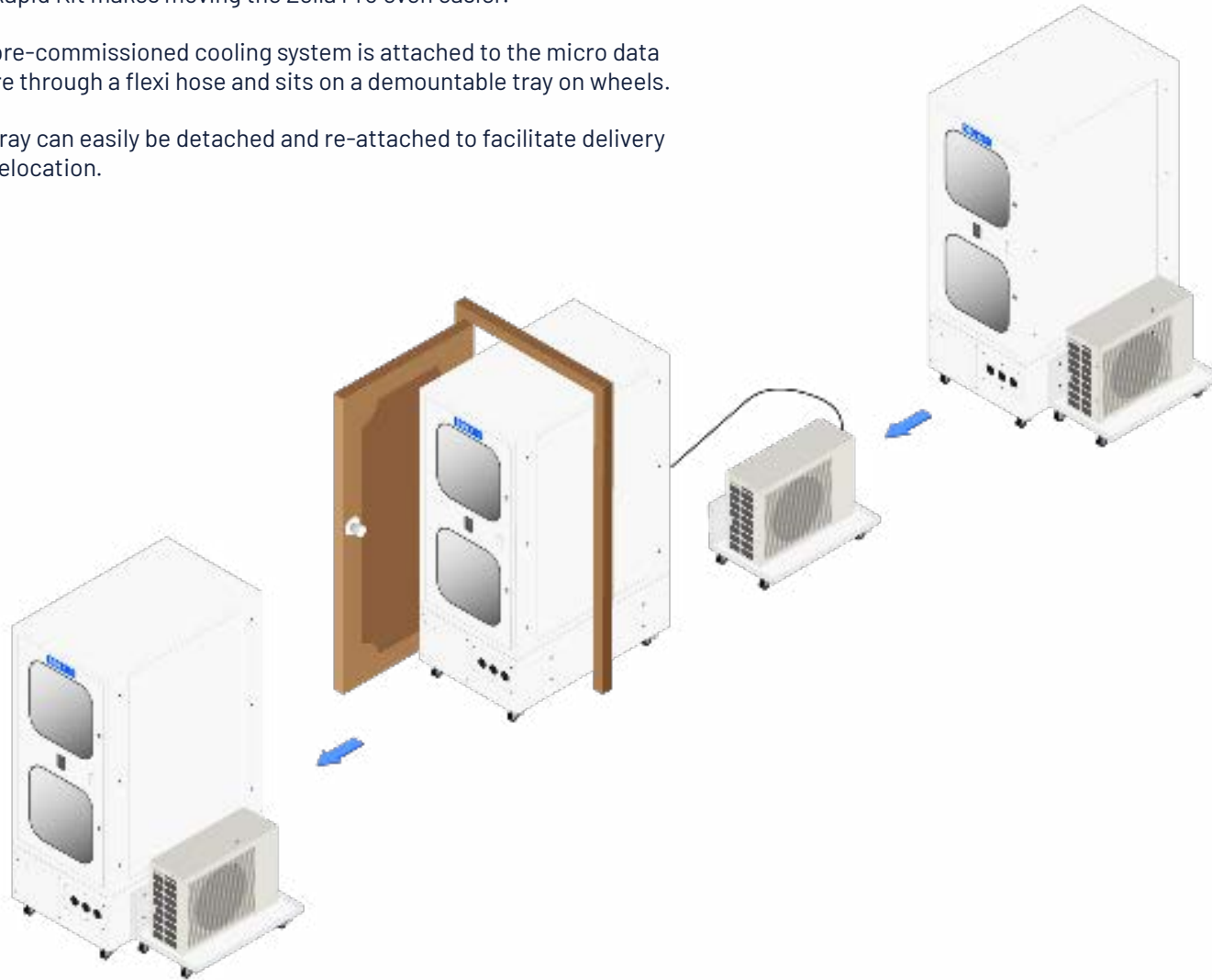


Rapid Kit (optional)

The Rapid Kit makes moving the Zella Pro even easier.

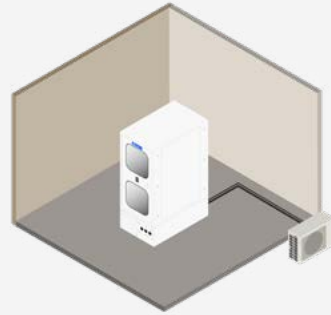
The pre-commissioned cooling system is attached to the micro data centre through a flexi hose and sits on a demountable tray on wheels.

The tray can easily be detached and re-attached to facilitate delivery and relocation.

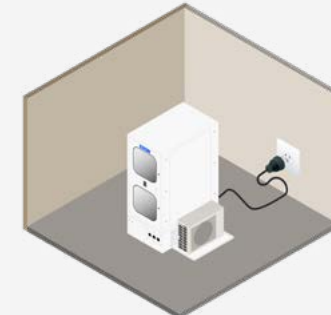


Zella Pro vs Zella Pro Rapid

ZELLA Pro



ZELLA Pro ▶▶ RAPID



Installation

Installation of a Zella Pro

Requires an electrician to connect to mains power (hardwire) and air conditioning technician to commission the cooling system. The Zella Pro will be placed indoors, and the cooling system will be placed in a separate external location.

Installation of a Zella Pro Rapid

No installation required. Simply plug into any 20amps power source. Cooling system is pre-commissioned.



Relocation

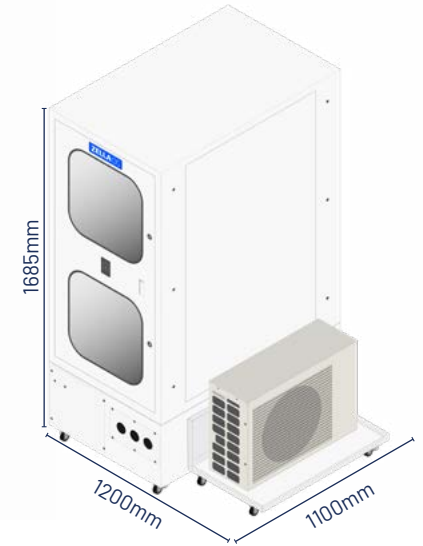
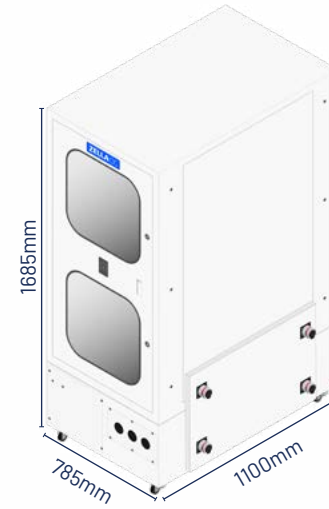
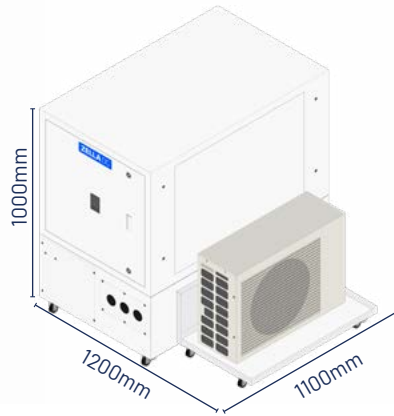
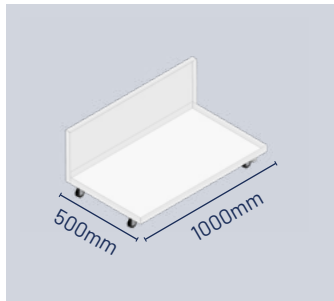
Relocation of a Zella Pro

Requires an electrician to disconnect and then reconnect to mains power (hardwire) and air conditioning technician to decommission and then recommission the cooling system.

Relocation of a Zella Pro Rapid

The Zella Pro Rapid has wheels so it can be moved easily. Simply unplug it and transport it to your desired location.

Zella Pro Rapid Dimensions and Weights



ZELLA Pro 12

ZELLA Pro 25

	Pro Rapid 12	Pro Rapid 25	Rapid Tray
Standard dimensions (L x W x H) mm	Closed tray: L1100 x W785* x H1000 Open tray: L1100 x W1200 x H1000	Closed tray: L1100 x W785* x H1685 Open tray: L1100 x W1200 x H1685	500 x 1000
Base weight (approx.)	120kg	225kg	
Client available space (2U internal switchboard)	×	23U	

* Closed width includes 50mm for the wheels. Wheels can be removed if needed.

Our product range - Technical Specifications



ZELLA Pro AC

Your indoor data centre



ZELLA Pro DC

Your indoor data centre

[Download](#)



ZELLA Hut AC

Your outdoor data centre

[Download](#)



ZELLA Hut DC

Your outdoor data centre

Coming Soon



ZELLA Max AC

Your containerised data centre

[Download](#)



ZELLA Max DC

Your containerised data centre

Coming Soon



ZELLA Pro

Your instant data centre

[Download](#)



ZELLA Fort

Your rugged data centre

[Download](#)

ZELLA DC

Your data centre, your way

About Zella DC

Over a decade ago Zella DC pioneered the micro data centre. Since then, our next-generation server room in a box have been proven to work in the harshest environments on earth. The result is a vendor-agnostic approach to software, hardware manufactured to global standards, and partners across six continents.

Unit 17, 386 Scarborough Beach Road
Osborne Park, 6017
Western Australia

Info@zelladc.com
+61 8 6311 2814

© 2023 Zella DC