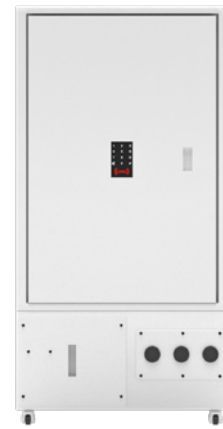


# ZELLA DC™

## Modular Micro Data Centre Solutions Technical Specifications



**ZELLA 12**



**ZELLA 25**



**ZELLA 38**

# Micro data centres

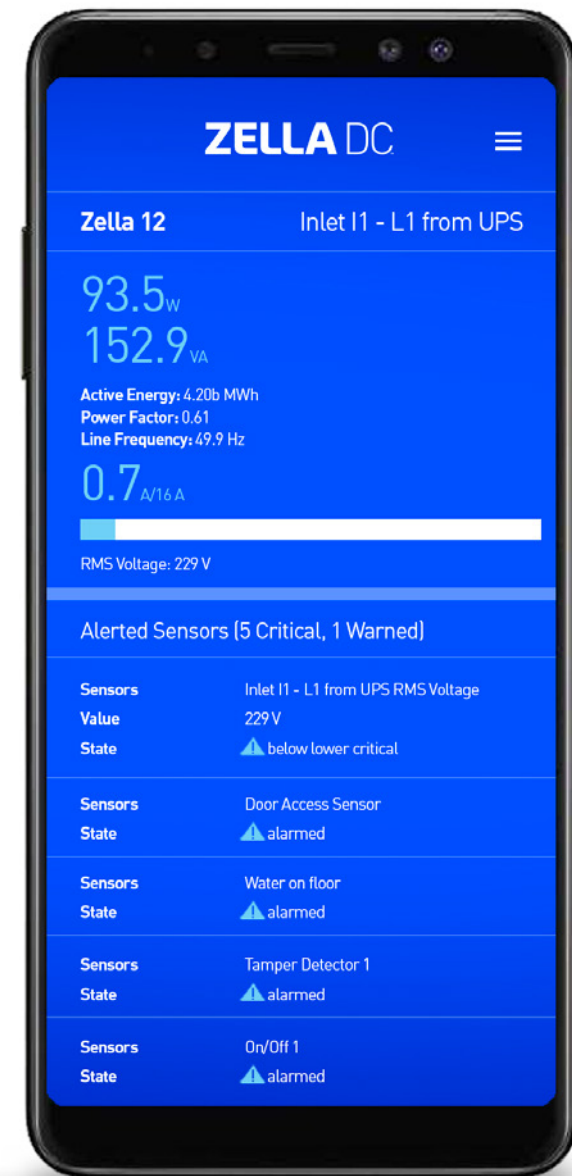
Many offices are partially or fully managed by non-IT staff, introducing risks, costs and higher degrees of central IT support. Asset control, software upgrades, security patches and technology refreshes can be major problems in highly distributed environments.

By focusing only on achieving excellence in design and by learning from its customers Zella DC has grown into a world-leading supplier of stand-alone, energy-efficient, cost-effective modular micro data centres.

A Zella DC micro data centre is a stand-alone housing unit that replicates all of the cooling, security, power and monitoring capabilities of a traditional data center on a much smaller, lower cost scale. It miniaturizes the data center into the size of an average refrigerator, offering its own cooling and power capabilities, significantly reducing operational and energy costs by 30-60%, and on-premise IT footprint. Moreover, it allows for portability and can be moved from location to location, and expanded to a set of “modular” data centers as business grows.

Zella DC micro data centres are the perfect solution for companies, which must house critical infrastructure in a quiet office amongst personnel through to infrastructure-poor, environmentally harsh remote locations.

Each Zella DC is robust, secure, with cooling systems that minimise energy cost while giving customers flexibility of size and sophistication. All boxes are monitored for performance 24/7/365 even when there is no network available.



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## Zella DC models

**ZELLA 12.**

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**ZELLA 25.**  
(dual cooling)

**ZELLA 38.**  
(dual cooling)

### Key features and benefits

Very small footprint	✓	✓	✓	✓	✓
No hot air is expelled into surrounding environment	✓	✓	✓	✓	✓
Air is self contained within the Zella DC (dust proof)	✓	✓	✓	✓	✓
Extremely quiet - less than 50 decibels (equivalent to a quiet library)	<50	<50	<50	<50	<50
Quick to install	1 to 3 hours	1 to 3 hours	1 to 3 hours	1 to 3 hours	1 to 3 hours
Compact (standard size fits through any door)	✓	✓	✓	✓	✓
Easily redeployed	✓	✓	✓	✓	✓
Highly energy efficient	✓	✓	✓	✓	✓
Extends life of IT equipment	✓	✓	✓	✓	✓
Highly safe and secure	IP65	IP65	IP65	IP65	IP65
Intelligent and pre-configured	self learning	self learning	self learning	self learning	self learning
Software that enables better management of assets, change and capacity	✓	✓	✓	✓	✓
Seamlessly manage power monitoring, environmental monitoring and energy	✓	✓	✓	✓	✓
Perfect for quiet office environments	✓	✓	✓	✓	✓
Perfect for dusty / hot industrial environments	✓	✓	✓	✓	✓

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(dual cooling)

### Key features and benefits

Fabrication	Metal	Metal	Metal	Metal	Metal
Insulation for noise and heat	✓	✓	✓	✓	✓
Colour (standard)	White	White	White	White	White
Colour (colour palette available)	Optional	Optional	Optional	Optional	Optional
Standard front door - security glass (laminated)	✗	✓	✓	✓	✓
Solid front door (without glass)	Optional	Optional	Optional	Optional	Optional
Wheels have self leveling and locking pads	✓	✓	✓	✓	✓
Modular and scalable	✓	✓	✓	✓	✓
360 degree access with removable side panels	✓	✓	✓	✓	✓
Internal LED bar lights	✓	✓	✓	✓	✓
Colour LED lights (programmable)	Optional	Optional	Optional	Optional	Optional
Cable management access points on roof and below rear door	✓	✓	✓	✓	✓
50mm cable glands attach to access points on roof and base	✓	✓	✓	✓	✓

### Dimensions and weights

Standard dimensions (L x W x H) mm	1100x685x1000	1100x685x1685	110x685x2275	110x685x1790	110x685x2380
Optional dimensions (800mm width incl. Vertical cable management brackets)	✗	✗	110x685x2275	✗	110x685x2380
Weight (approx.) Kg	90	225	308	265	348
Client available space (2U internal switchboard)	12U	23U	36U	23U	36U

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### 1-3KVA UPS pre-installed and configured (optional)

UPS DAKER 1kVA (310050) internal batteries 800w (10 min backup) 16kg 2U	✓	✓	✓	✓	✓
UPS DAKER 2kVA (310051) internal batteries 1600w (10 min backup) 29.5kg 2U	✓	✓	✓	✓	✓
UPS DAKER 3kVA (310052) internal batteries 3000w (10 min backup) 30kg 2U	✓	✓	✓	✓	✓

### 1-3 kVA Battery Bank to suit (optional)

Battery Bank (310769) DK 1kVA (suits model 310050)	✓	✓	✓	✓	✓
Battery Bank (310770) DK 1kVA (suits model 310051)	✓	✓	✓	✓	✓
Battery Bank (310771) DK 1kVA (suits model 310052)	✓	✓	✓	✓	✓

### 4.5kVA, 6kVA and 10kVA UPS pre-installed and configured (optional)

UPS DAKER DK 4.5kVA (310056) no internal battery 4050w 25kg 2U	✓	✓	✓	✓	✓
UPS DAKER DK 6kVA (310057) no internal battery 4500w 25kg 2U	✓	✓	✓	✓	✓
UPS DAKER DK 10kVA (310058) no internal battery 5400w 25kg 3U	✓	✓	✓	✓	✓
4.5kVA, 6kVA & 10kVA Battery Banks (compulsory if UPS option chosen)	✓	✓	✓	✓	✓
Battery Bank (310772) DK 4.5kVA ( suits model 310056) 10min run-time 3U	✓	✓	✓	✓	✓
Battery Bank (310772) DK 6kVA ( suits model 310055) 10min run-time 3U	✓	✓	✓	✓	✓
Battery Bank (310766) DK 10kVA ( suits model 310058) 7min run-time 3U	✓	✓	✓	✓	✓
Rail Kit & Dry Contact Card	✓	✓	✓	✓	✓
Rail kit for UPS (310952)	✓	✓	✓	✓	✓
Rail kit for battery bank (310952)	✓	✓	✓	✓	✓
Dry contact card for smart UPS (310954)	✓	✓	✓	✓	✓
Bypass Switch (optional)	✓	✓	✓	✓	✓

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### Switchboard and Power

Rack-mounted switchboard (220 to 240v) - 50/60hz operation	✘	2U	2U	2U	2U
Standard single phase (1-6 KVA) - (32amp supply)	✘	1-6KVA	1-6KVA	1-6KVA	1-6KVA
8KVA switchboard (60amp supply)	✘	Optional	Optional	Optional	Optional
Three phase switchboard	✘	Optional	Optional	Optional	Optional
Surge / RCD wand circuit breaker protection	✘	✓	✓	✓	✓
Switchboard allows for easy UPS installation	✘	✓	✓	✓	✓
Power lead cable length (standard - 5m)	5m	5m	5m	5m	5m
Additional power lead cable length (5m length)	Optional	Optional	Optional	Optional	Optional
Recommended - hard wire to building power source	✓	✓	✓	✓	✓

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### Physical Security

Keypad / card and PDView access control (standard)	✓	✓	✓	✓	✓
Vandal proof and water proof	✓	✓	✓	✓	✓
IP based biometric access with proximity card (fingerprint/card)	Optional	Optional	Optional	Optional	Optional
Ethernet interface for TCP/IP communication	✓	✓	✓	✓	✓
RF card	✓	✓	✓	✓	✓
Mag Locks front and rear door with pulling force (kgs)	250kgs	250kgs	500kgs	250kgs	500kgs
All security features are plug and play (12v)	12V DC	12V DC	12V DC	12V DC	12V DC

### ZELLA Smart - Intelligent power distribution (PDU)

Rated Input power (AMPS)	16amps	16amps	32amps	16amps	32amps
C13 - Output connections - 10A	8	11	16	11	16
C19 - Output connections 16A	0	1	4	1	4
Energy metering with bill grade accuracy (+/- 1%)	✓	✓	✓	✓	✓
Metering per input line	✓	✓	✓	✓	✓
Metering per branch circuit breaker	✓	✓	✓	✓	✓
Metering per output receptacle	✓	✓	✓	✓	✓
Remote outlet switching	✓	✓	✓	✓	✓
Networking	✓	✓	✓	✓	✓
Onboard display	✓	✓	✓	✓	✓
Overload protection	✓	✓	✓	✓	✓
Cable retention	✓	✓	✓	✓	✓



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### ZELLA Smart - Intelligent environmental monitoring

Max security of data connections and user logins (Military & Government grade)	✓	✓	✓	✓	✓
Configure within minutes with quick USB setup (Zella DC USB)	✓	✓	✓	✓	✓
Integrated tablet display via front door USB IP65 port	✓	✓	✓	✓	✓
Turns your tablet or phone into remote display (iOS and Android)	✓	✓	✓	✓	✓
View your critical data via your smart device	✓	✓	✓	✓	✓
Self-learning	✓	✓	✓	✓	✓
Stores data even when the network is not available	✓	✓	✓	✓	✓

### ZELLA Smart - Pre-configured and sensor ready

Temperature	✓	✓	✓	✓	✓
Door alarm	✓	✓	✓	✓	✓
Remote door access	✓	✓	✓	✓	✓
Water sensor	✓	✓	✓	✓	✓
Fire and fire fault alarm	✓	✓	✓	✓	✓
Web camera	✓	✓	✓	✓	✓
Temperature and humidity	Optional	Optional	Optional	Optional	Optional
Airflow sensor	Optional	Optional	Optional	Optional	Optional
Vibration sensor	Optional	Optional	Optional	Optional	Optional
Motion sensor	Optional	Optional	Optional	Optional	Optional
High definition camera upgrade	Optional	Optional	Optional	Optional	Optional

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(dual cooling)

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(dual cooling)

### DCIM Software

PowerIQ ready (full access)	✓	✓	✓	✓	✓
Environmental monitoring	✓	✓	✓	✓	✓
Energy management	✓	✓	✓	✓	✓
Power management	✓	✓	✓	✓	✓
Configure your dashboard to suit your priority	✓	✓	✓	✓	✓
Vendor agnostic management	✓	✓	✓	✓	✓
Thresholds and alerts	✓	✓	✓	✓	✓

## Zella DC models

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(dual cooling)

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(dual cooling)

### Cooling system options - Gas (external condenser)

Cooling (Gas) 2.1kw (7165 BTU)	✓	Zella 25 Basic	Zella 38 Basic	✗	✗
Has external / outside condenser - max run distance (vertical)	15m	15m	15m	15m	15m
Has external / outside condenser - max run distance (vertical)	10m	10m	10m	10m	10m
Condenser size (mm)	550x675x284	550x675x284	550x675x284	550x675x284	550x675x284
Gas type	R32 / R410	R32 / R410	R32 / R410	R32 / R410	R32 / R410
Pipe sizes - liquid (mm)	6.4	6.4	6.4	6.4	6.4
Pipe sizes - gas (mm)	9.5	9.5	9.5	9.5	9.5
Cooling (Gas) 2.6kw (8871 BTU)	Optional	Zella 25 Basic	Zella 38 Basic	✗	✗
Has external / outside condenser - max run distance (horizontal)	15m	15m	15m	15m	15m
Has external / outside condenser - max run distance (vertical)	10m	10m	10m	10m	10m
Condenser size (mm)	550x675x284	550x675x284	550x675x284	550x675x284	550x675x284
Gas type	R32 / R410	R32 / R410	R32 / R410	R32 / R410	R32 / R410
Pipe sizes - liquid (mm)	6.4	6.4	6.4	6.4	6.4
Pipe sizes - gas (mm)	9.5	9.5	9.5	9.5	9.5
Cooling (Gas) 3.4kw (12000 BTU)	Optional	✓	✓	✓	✓
Has external / outside condenser - max run distance (horizontal)	20m	20m	20m	20m	20m
Has external / outside condenser - max run distance (vertical)	15m	15m	15m	15m	15m
Condenser size (mm)	550x675x284	550x675x284	550x675x284	550x675x284	550x675x284
Pipe sizes - liquid (mm)	R32 / R410	R32 / R410	R32 / R410	R32 / R410	R32 / R410
Pipe sizes - gas (mm)	9.5	9.5	9.5	9.5	9.5

## Zella DC models

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**ZELLA 25.**  
(dual cooling)

**ZELLA 38.**  
(dual cooling)

### Cooling system options - Gas (external condenser) - (continued)

Cooling (Gas) 4.6kw (18000 BTU)	✘	Optional	Optional	Optional	Optional
Has external / outside condenser - max run distance (vertical)	30m	30m	30m	30m	30m
Has external / outside condenser - max run distance (vertical)	20m	20m	20m	20m	20m
Condenser size (mm)	695x930x350	695x930x350	695x930x350	695x930x350	695x930x350
Gas type	R32 / R410	R32 / R410	R32 / R410	R32 / R410	R32 / R410
Pipe sizes - liquid (mm)	6.4	6.4	6.4	6.4	6.4
Pipe sizes - gas (mm)	12.7	12.7	12.7	12.7	12.7
Cooling (Gas) 6kw (20427 BTU)	✘	Optional	Optional	Optional	Optional
Has external / outside condenser - max run distance (horizontal)	30m	30m	30m	30m	30m
Has external / outside condenser - max run distance (vertical)	20m	20m	20m	20m	20m
Condenser size (mm)	695x930x350	695x930x350	695x930x350	695x930x350	695x930x350
Gas type	R32 / R410	R32 / R410	R32 / R410	R32 / R410	R32 / R410
Pipe sizes - liquid (mm)	6.4	6.4	6.4	6.4	6.4
Pipe sizes - gas (mm)	12.7	12.7	12.7	12.7	12.7

### Condenser distance and information

Condenser cable lengths - standard	10m	10m	10m	10m	10m
Additional condenser length on request with order	20m	20m	20m	20m	20m
Zella DC powers the external condenser	✓	✓	✓	✓	✓
All condensers are pre-gassed	✓	✓	✓	✓	✓
Copper piping to suit Zella DC available in 20m lengths (optional)	✓	✓	✓	✓	✓

## Zella DC models

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(dual cooling)

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(dual cooling)

### Cooling system options - Chilled water (no condenser)

Cooling (Water) 2.6kw (12000 BTU) Chilled Water	✓	✓	✗	✗	✗
Zella DC length requirement	1000 depth only	1000 depth only	1000 depth only	1000 depth only	1000 depth only
Water flow - l/h	454	454	454	454	454
Water pressure drop - kPa	18	18	18	18	18
Entering water temp - 7 degrees (temp rise of 5 degrees)	7 degrees	7 degrees	7 degrees	7 degrees	7 degrees
Cooling (Water) 2.6kw (12000 BTU) Chilled Water	✓	✓	✗	✗	✗
Zella DC length requirement	1200 depth only	1200 depth only	1200 depth only	1200 depth only	1200 depth only
Water flow - l/h	530	530	530	530	530
Water pressure drop - kPa	22	22	22	22	22
Entering water temp - 7 degrees (temp rise of 5 degrees)	7 degrees	7 degrees	7 degrees	7 degrees	7 degrees
Cooling (Water) 2.6kw (12000 BTU) Chilled Water	✗	✓	✓	✓	✓
Zella DC length requirement	1200 depth only	1200 depth only	1200 depth only	1200 depth only	1200 depth only
Water flow - l/h	765	765	765	765	765
Water pressure drop - kPa	29	29	29	29	29
Entering water temp - 7 degrees (temp rise of 5 degrees)	7 degrees	7 degrees	7 degrees	7 degrees	7 degrees

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(dual cooling)

### Fire Protection

Fire Protection	2U	2U	2U	2U	2U
Top mounted Zella DC Pyrorack	✓	✓	✓	✓	✓
Human friendly	✓	✓	✓	✓	✓
Equipment friendly	✓	✓	✓	✓	✓
Environmentally friendly	✓	✓	✓	✓	✓
Easy to maintain and replace canister	✓	✓	✓	✓	✓
10 year life span	✓	✓	✓	✓	✓
Monitoring	✓	✓	✓	✓	✓

### Zella Care maintenance and warranty

12 months	✓	✓	✓	✓	✓
Extended warranty (2-5 years)	Optional	Optional	Optional	Optional	Optional
Zella Care maintenance (pro-active - 1 year)	✓	✓	✓	✓	✓
Zella Care maintenance (pro-active additional years)	Optional	Optional	Optional	Optional	Optional
All components are plug and play for ease of maintenance	✓	✓	✓	✓	✓

### All components and fabrication have the following Certifications

UL	✓	✓	✓	✓	✓
CE	✓	✓	✓	✓	✓
RoHS/WEE	✓	✓	✓	✓	✓
ISO	✓	✓	✓	✓	✓

## Zella DC models

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### Industry deployments

Government (Federal and Local)	✓	✓	✓	✓	✓
Education (Schools and Universities)	✓	✓	✓	✓	✓
Health (Hospitals and Medical Centres)	✓	✓	✓	✓	✓
SME (Small to Medium Size Business)	✓	✓	✓	✓	✓
Oil and Gas	✓	✓	✓	✓	✓
Mining	✓	✓	✓	✓	✓
Military	✓	✓	✓	✓	✓
Telecommunications	✓	✓	✓	✓	✓
Large Enterprise	✓	✓	✓	✓	✓

# Meet the uptime experts

A decade ago Zella DC pioneered the micro data centre. Since then, our next-generation server rooms 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 five continents.

## Summary of solution benefits:

Uptime and space usage



Cyber and physical security



Risk from human error



Energy and noise efficiency



Self-learning and autonomy



Data sovereignty



Scalability as needed



Local storage/ fast processing



Email [info@zelladc.com](mailto:info@zelladc.com)  
Phone +61 (8) 6311 2814  
Website [zelladc.com](http://zelladc.com)

**ZELLA DC**