



EDGE-3

Soundproof Micro Data Center

O&M Manual



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Contents

Packaging	4
Important Safety Information	
Safety Symbols	5
Safety Indicators	5
Safety Instructions	6
Model identification	7
EDGE-3 Installation	
Moving the EDGE-3	8
Electrical Installation	9 - 10
Configuration	11 - 13
Mounting angle adjustment	14 - 15
Door removal - Front	16
Door removal - Rear	16
Fan panel removal	17
Cable entry system	18
Gland plates	19
Extension kit assembly	20
Plinth kit assembly	21
EDGE-3 DAX kit assembly	22
EDGE Management System	
Operation	23
Product Description	24
Quick starter guide	25
WebUI	
Overview	26
Dashboard	27
Fan Speed	28
Environmental	29
Security	30
Alerts	31-32
Reporting	33 - 36
Settings	
Network	37
Device Manager	38 - 40
User Accounts	38
Sensor Names	39
SNMP	39-40

Packaging

Inspection

Inspect the packaging and contents for shipping damage. Make sure that all parts are accounted for. Report any damage immediately to the shipping agent. Report missing contents, damage, or other problems immediately to USystems or your reseller.

Please Recycle

The shipping materials are recyclable. Save them for later use, or dispose of them appropriately.



Important Safety Information

Read the instructions carefully to become familiar with the equipment before trying to install, operate, service or maintain it. The following messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

Safety Symbols

The following symbols and markings related to safety are used on the EDGE system, the EMS and throughout this document. Their definitions are as follows:



This symbol indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety symbol indicates a warning/caution to a potential hazard or that and an appropriate safety instruction should be followed



This symbol indicates that the item is heavy or risk of injury and may require two persons or appropriate lifting equipment to carry or manoeuvre. Appropriate lifting and carrying instructions should be followed.



This Marking (when used), indicates that product is configured for 100 to 130V operation



This Marking indicates that product is configured for 200 to 240V operation

Safety Indicators

The following are used throughout the documentation to indicate the appropriate hazard or instruction related to safety.

DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, **will result in death** or serious injury.

WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, **can result in death** or serious injury.

CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, **can result in minor** or moderate injury.

CAUTION

CAUTION, used without the safety alert symbol, indicates a potentially hazardous situation which, if not avoided, **can result in** equipment damage.

NOTICE

NOTICE addresses practices not related to physical injury including certain environmental hazards, potential damage or loss of data

Introduction

Safety Instructions

- The EDGE system is to be powered from a dedicated power source (Refer to Model Identification & Rating plate for voltage input).
- The EDGE system is not to be powered via an extension cord.
- The EDGE System Fans are factory installed and configured for either 100-130V or 200-240V (Refer to EDGE Rating plate and EMS marking for the voltage set to).
- The EMS appliance outlets are for the EDGE fan power only. DO NOT plug any other appliance into the EMS power Outlets.
- When performing maintenance, the EDGE System should be Isolated or the appropriate instructions followed.
- When Installing equipment within the EDGE ensure additional safety Instructions are specified.
- Power and distribution cables should be installed and routed so that they are unlikely to be damaged in normal operation.
- Cable ingress to the equipment should only be made via the dedicated cable entry points.

Introduction

EDGE-3 Model Identification



The EDGE model configuration shall be identified by the rating plate adhered on the external of the cabinet by the User display.

The model number nomenclature is defined as follows:

E_[a]_[b]-_[c]_[d]-_[e]

Where:

- [a] = **3** = Soundproofed variant, 24 to 42U
- [b] = Single alpha-numeric character for colour finish (Non safety critical)
- [c] = Height in U (model dependant), 24U to 60U
- [d] = Depth (dm) - 06 to 14
- [e] = Voltage Input & Fan module: **15** = 100-130V or **24** = 200-240V

	www.usystems.com +44 (0) 1234 761720 Systems House, 235 Ampthill Road Bedford MK42 9QG UK
Model:	E3G-2412-24
Hardware version:	P3-EDGE-xx
Software version:	V1.0
Serial number:	00000000
Input voltage:	200-240V, 50/60Hz, 5A
No of Fans / voltage:	2 x 200-230, 50/60Hz, 170W
DoM (mm/yy)	08/20
 <div> Intertek 5012827 </div> <div> Conforms to UL Std UL 61010-1 Cert. CSA C22.2 #61010-1 </div>	

Example of Identification/Rating label

The example above shows an EDGE-3 Soundproof cabinet, 24U in height, 120cm depth, configured for 240V input, with two fan modules (1 per door) rated 200-230V, 170W

Installation

CAUTION

HAZARD

This cabinet can be tipped. Use extreme caution when unpacking or moving.

At least 2 people are required to unpack and move the cabinet.

Putting the cabinet in place of situ before installation of the equipment.

When moving the equipment after installation, isolate, disconnect and stow the power cable to prevent damage.



Unpacking instructions

- The cabinet will be bubble and shrink wrapped as well as having protective cardboard corners.
- When unpacking the cabinet do not run a blade all the way through the packaging as it may scratch the cabinet paint.
- Remove the cardboard corners by cutting the tape.
- Pull off the shrink wrap.
- Un-ravel the bubble wrap.

The cabinet will be unlocked and the keys located inside on the front mounting angles.

Moving the EDGE-3

Moving instructions

- When moving the cabinet with equipment inside, place the heavy equipment at the lower part of the 19 inch area.
- Maximum load on castors is 500kg.
- Make sure the levelling feet are up and push the cabinet only from the front or rear when moving the cabinet on its castors. Never push the cabinet from the sides to avoid potential tipping.
- When installed ensure the adjustable feet are down and the cabinet is secured.

Installation

Electrical Installation.

⚠ WARNING

The EDGE-3 equipment is configure for either 100-130V fans or 200-240V dependant on the fans fitted, this will be indicated to the rear of the EMS rating label. Reference image below.

The EDGE System requires a dedicated Power Source.

An approved power cord type to a maximum of 3m in length should be used to power the EDGE System to ensure continued compliance.

Cables to be routed to avoid damage to the cables and prevent trip or other hazards.

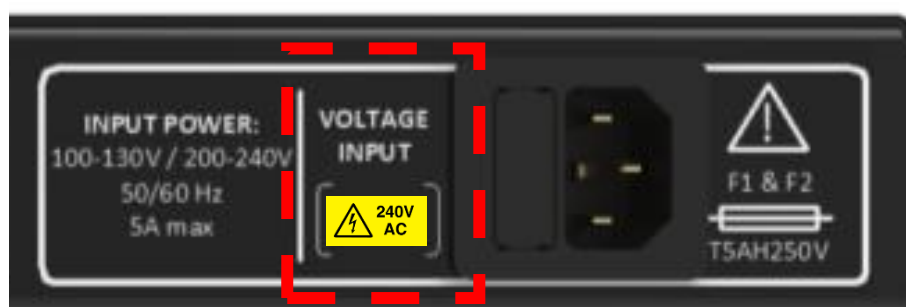
The EDGE system is to be electrically installed in accordance with local and regional electrical codes.

Input Voltage range	100-130V / 200-240V, 50/60Hz, 5A max (Voltage input model dependant)**
Fan Module Voltage	Refer to EMS Rear panel & model Identification rating for configuration

Electrical supply to the EDGE System requires to be 100-130V or 200-240V 50/60 Hz from a 10A dedicated branch circuit protected supply.

Electrical connection to the EDGE system is made via the EMS located within the cabinet to an IEC 60320-1 C-14 fused appliance inlet.

**The Voltage range input is dependent on the Fan module configuration. (Refer to model identification/rating label & the voltage “INPUT” marking located on the rear panel of the EMS.



Rear panel of EMS showing Voltage configured for 200-240V

Installation

The EMS provides supplementary protection via the fused inlet by 2 x High Rupture Capacity fuses rated T5AH250V.

The EDGE System for continued compliance must be provided with an appropriate Pre-approved power cord fitted with a regional plug to a maximum of 3 metres in length.

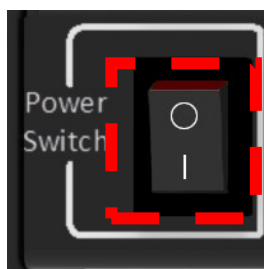
The power cord specification is defined below:

Type SJT or SVT / HO5VV-F <HAR., 3 x 18 AWG (1.0mm), 2C +PE rated 300V, VW-1 terminated with an IEC 60320-1 C13 appliance coupler and a regional plug.

The EDGE may be connected for permanent installation via a dedicated power source in accordance with local and regional electrical codes via an appropriately rated Isolator of which should be accessible and no more than 2 metres away from the EDGE Cabinet once installed

The EDGE power cable is to be installed via the cable entries fitted to the EDGE cabinet. Any Power cables to be provided to the EDGE cabinet both internally and externally, are to be routed to avoid damage and risk of further hazards.

Isolating of EDGE System



Turn off the power to the EMS and Fans by selecting the switch shown left to the off position (currently showing as 'on' in the picture).

Turn off input power at source and remove the IEC Input connector to the EMS.

INTERNAL EQUIPMENT

Any electrical equipment to be installed within the EDGE System is to be suitably electrically protected, again consideration to power cable installation and routing both internally and externally is a must.

If electrical distribution blocks are to be used they should not be overloaded, and the ampacity should not exceed the rated capacity of the distribution block.

Consideration for isolating equipment to be installed within the EDGE Cabinet should also be made.

If rack sliders are used high up in the cabinet ensure that there is sufficient weight at the bottom of the cabinet to support heavy equipment to avoid the cabinet tipping. We recommend heavy equipment mount as low as possible.

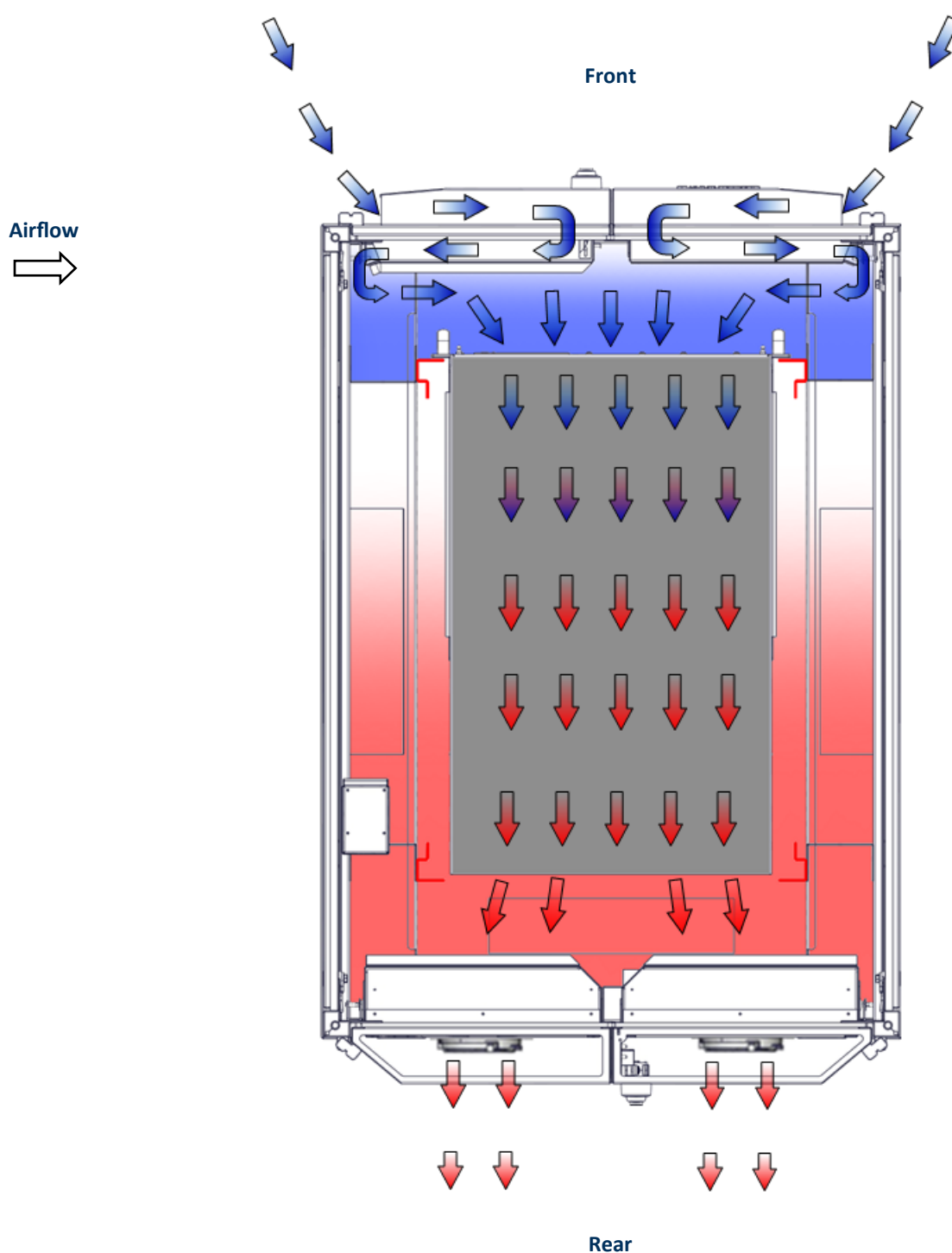
Installation

Configuration

Before installing the enclosure, plan the location and space needed to install equipment, and plan ergonomics of keyboards and video monitors. Improper airflow could damage installed components.

The following should be considered when finding a location for your enclosure

- Ambient temperature in the room should be as low as possible to allow efficient cooling.
- Do not install next to a radiator or heat source
- If installing with a DAX (Direct Airflow eXhaust) allow no more than 2m from a wall or window pan from the rear of the enclosure.
- Do not place the enclosure in direct sunlight or in a small non-air conditioned space.
- Place the enclosure close to ventilation or cool air ingress points in the room.



Installation

Configuration - Cooling and best installation practice

The EDGE-3 can achieve up to 12kW of heat removal. But in order to achieve these figures it is paramount that 'best installation practice' is adopted. Understanding the airflow characteristics of the EDGE-3 design is key.

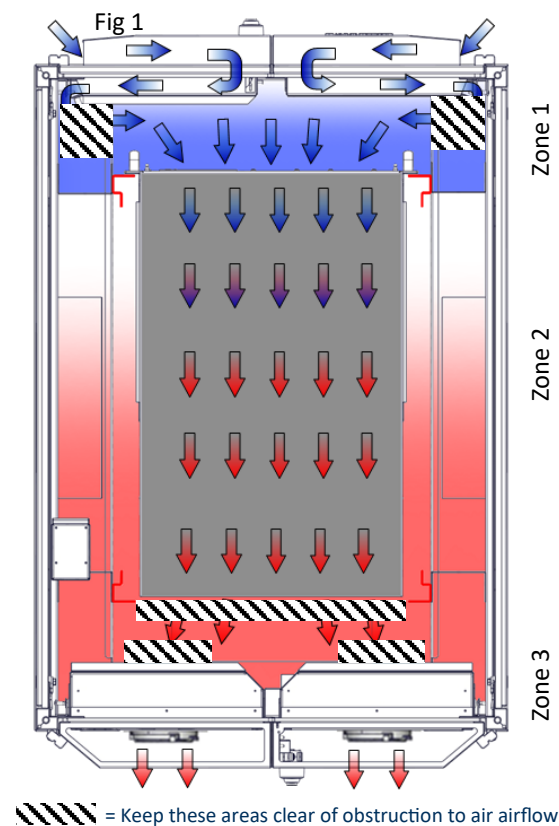
Airflow characteristics

The key difference between most 19" soundproof cabinets is the poor segregation between cold air entering into the cabinet and the IT equipment space – failure to deal with this results in hot spots and general heat recirculation issues.

The EDGE-3 deals with the problem by creating three separate zones – the first zone is the ‘patent pending’ double pass wardrobe front doors, ambient air passes through the full height of the doors and into the second zone.

This feature is of key importance as this allows a uniform flow of ambient cool air to be available at any ‘U’ position within the cabinet – so no equipment needs be starved of cool air. It is worth noting that this vertical space should be kept clear and that all cabling should be kept managed against the infill panels provided, using jumper rings or cable trunking .

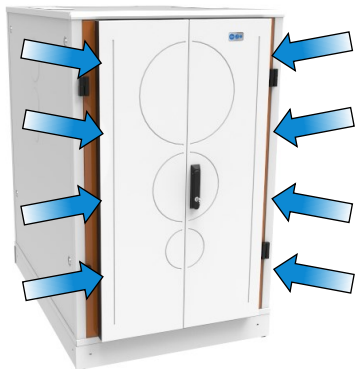
The result of best practice sealing - no hot air recirculation



The second zone is the IT equipment space and sealing between the first and second zone is critical; the EDGE-3 cabinet comes as standard with foam infills which covers the periphery of the 19" area see Figs 2

and 4.

Cabling can pass through this area from front to rear but maintaining the seal's integrity is very important. In addition to the peripheral area the 19" aperture also needs to be treated in the same way – completely sealed. Unfortunately not all equipment comes in the standard 19" format, for this reason there are a number of solutions designed to assist in this process - see Fig 2 and 5.



The patent pending air inlet wardrobe doors enable the required volume of air to uniformly flow over the full height of the 'U' (usable) space on both sides of the cabinet, thus ensuring that all the enclosed IT equipment receive the necessary amount of air.



NB The active rear door on the 12U model exhausts hot air to the base of the door and not the top as in other height models

Installation

Configuration - Cooling and best installation practice continued

It has long since been established that allowing heat recirculation in 19" cabinets results in IT equipment overheating which shortens its working life and more often leads to software and systems failures. Unfortunately this issue is compounded when using soundproof materials, owing to their heat insulation properties.

So to maintain optimum performance and a safe, controlled working environment for the IT equipment - one that overcomes hot spots and heat recirculation issues - it has to be dealt with by correct airflow management. Achieving this comes down to a combination of clever enclosure design and the application of best installation practice.

Keeping the vertical and horizontal cabling organised and managed is essential in order to allow ambient air to pass through onto the active equipment.

The foam running around the sides of the infills must be maintained to ensure its ongoing effectiveness.



EDGE-3 blanking panels require no fixings and play an important role in both airflow and sound proof management. A major benefit is the prevention of hot air re-circulation which eliminates the risk of hot spots



EDGE-3 sound proof cable entry system enable cabling in and out of the cabinet without compromising both sound or thermal performance. There are six available ports in total, three at the top and three at the bottom of the cabinet so further cable entry systems



EDGE-3 sound proof tower infill foam helps to retain maximum thermal performance and sound attenuation when fitting non 19" equipment such as a tower PC - available in 2 size kits to prevent hot spots and the potential over heating of active equipment



Installation

Mounting angle adjustments

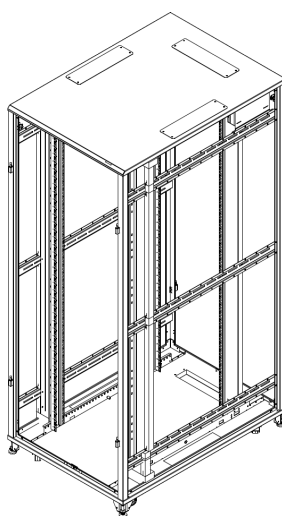
The mounting angles are factory fitted by default to 700mm. Both front and rear mounting angles are adjustable but it is advised to move the rear mounting angles to accommodate longer IT equipment.

Adjusting the mounting angles

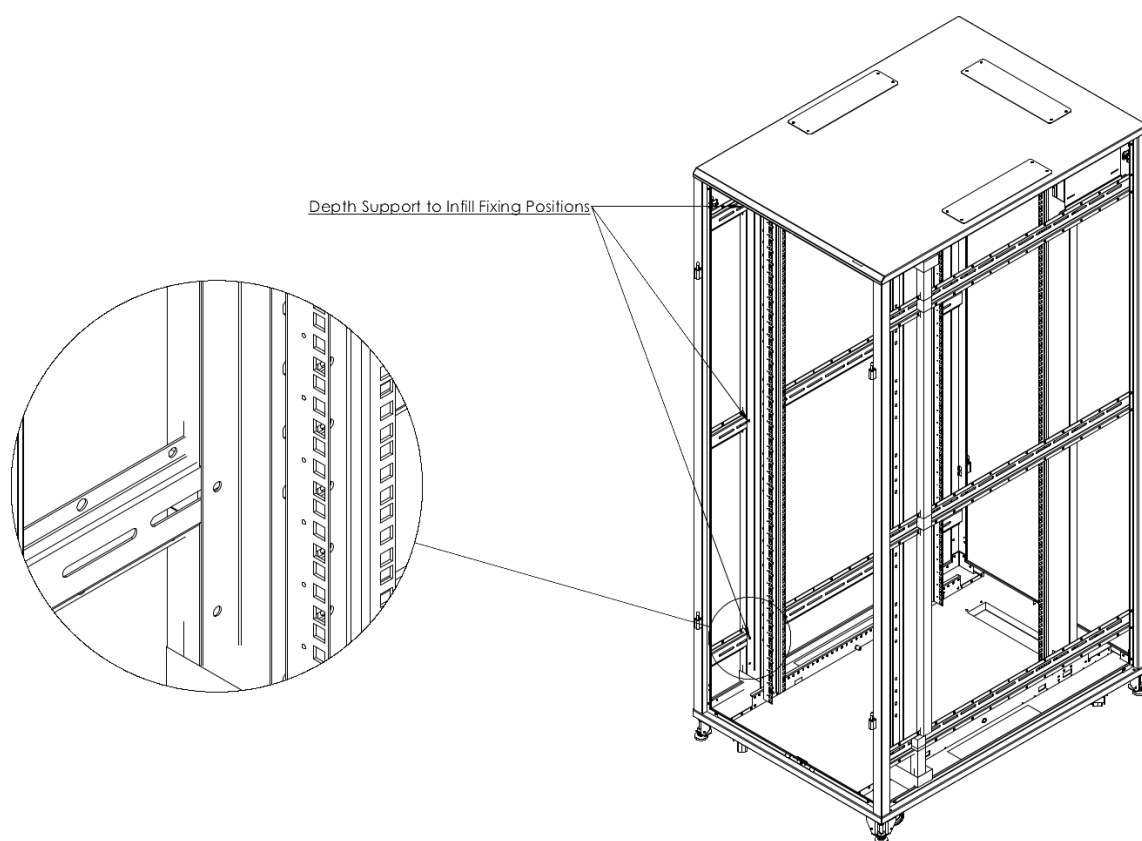
This task can only be performed when there is no IT equipment inside of the cabinet.

A Philips screwdriver and a 10mm spanner is needed to perform this task.

1. Take off both side panels to gain access to the depth support rails by opening both front and rear doors, turn the cam locks on the side panel to undo them from each depth support.

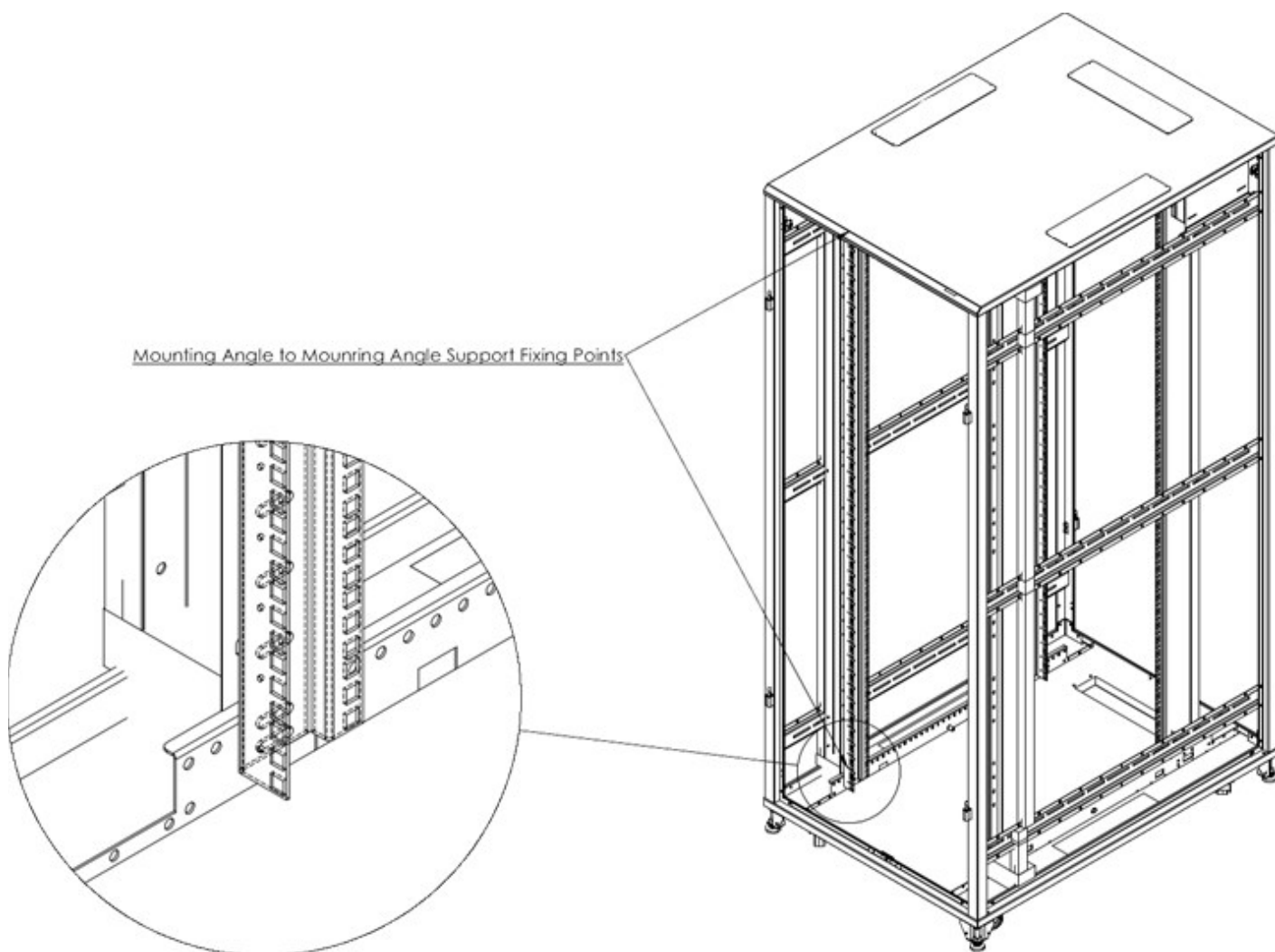


2. Use a Philips screwdriver and 10mm spanner (not provided) to remove the infill panels from the 3 depth support members.

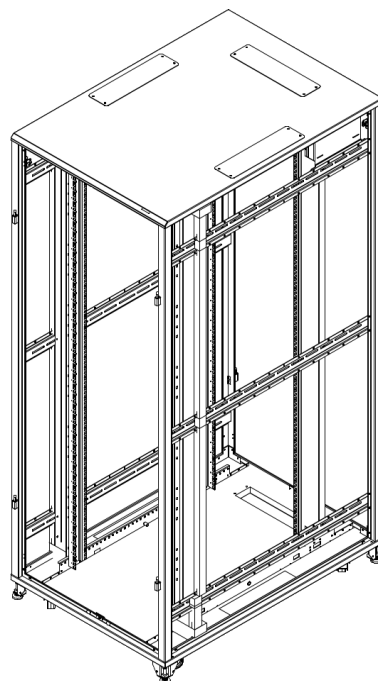


Installation (continued)

3. Remove the mounting angle from the top and bottom mounting angle supports by using the Philips screwdriver and 10mm spanner.



4. Move the mounting angle and infills into the desired place. Screw the mounting angle back into the top and bottom mounting angle support and infills back into the 3 depth supports.

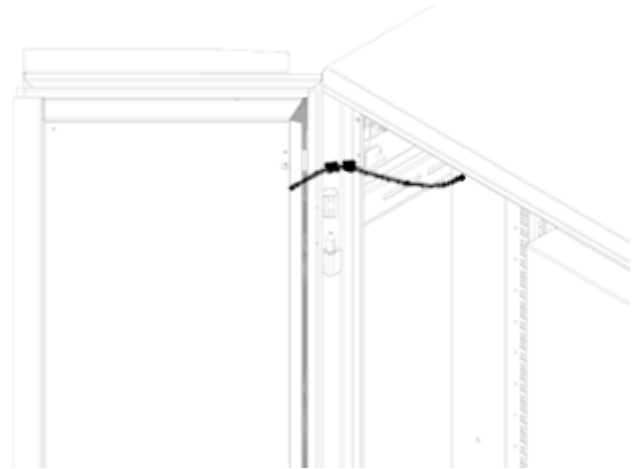


Installation

Door removal - Front passive (non-fan)



When removing LCD door, make sure that the micro usb cable attached to the door has been disconnected.



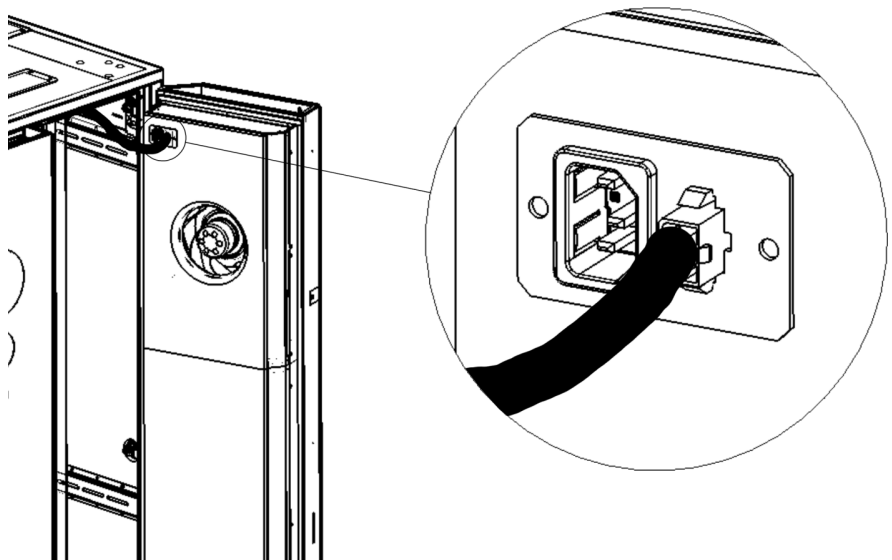
Open both doors to 135° (does not need to be exact) to allow the most grip when holding onto the door and lift off both hinges.

Door removal – Rear Active (Fan side)

Please follow local safety protocols
Advisory 2 people to remove this door



Turn active door to a 135° position and unplug the IEC power connector and 6 way Molex as shown and lift the door of its hinges.



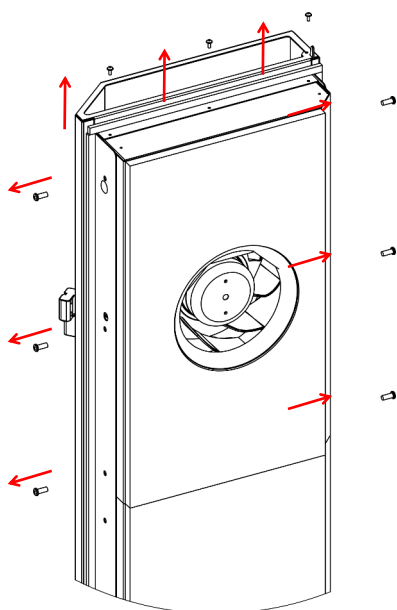
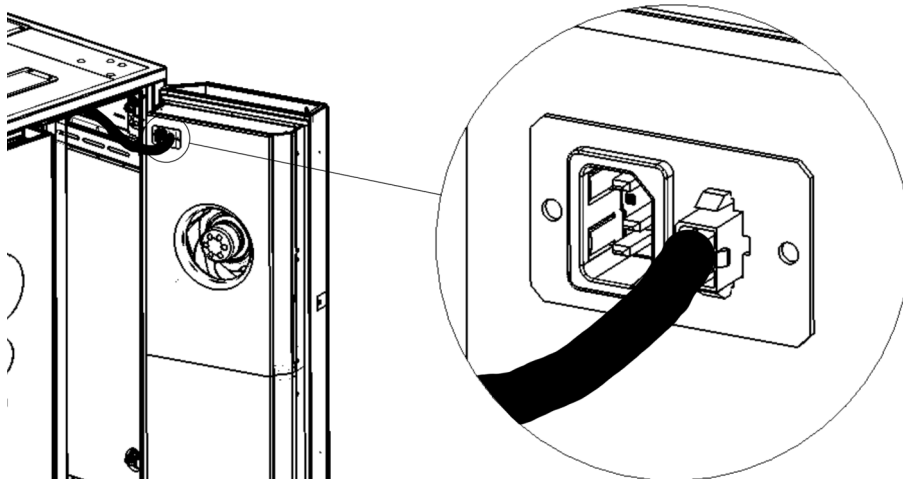
Installation

Fan Panel removal

To removal/replace a fan panel turn off power to the fans.

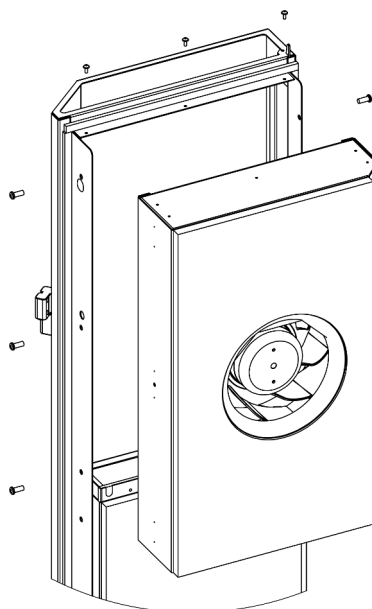


1. Disconnect the IEC and fan connector cable from the fan panel



2. Using a Philips screwdriver unscrew the 9 screws surrounding the fan panel as shown

3. The fan panel will now slide out, reverse the removal procedure to install the fan module

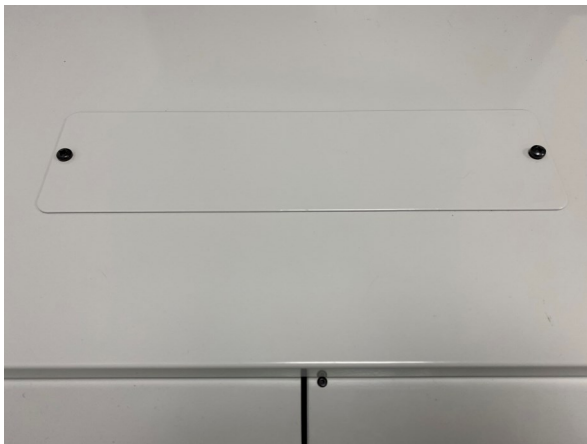


Installation

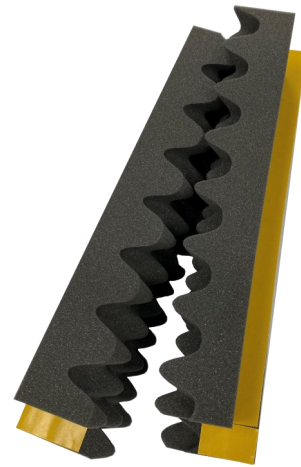
Cable entry system

The cable entry system can be used at any of the cable entry points by removing the gland plate and adding the cable entry system in its place.

Remove the gland plate by unscrewing the 2 m6 bolts and lifting the panel away from the enclosure. Keep somewhere safe if needing to put back.



Remove the yellow tape cover from the cable entry system foam.



Keep the cable entry foam together and feed it through the gland hole and firmly press down on the sides for a good seal.



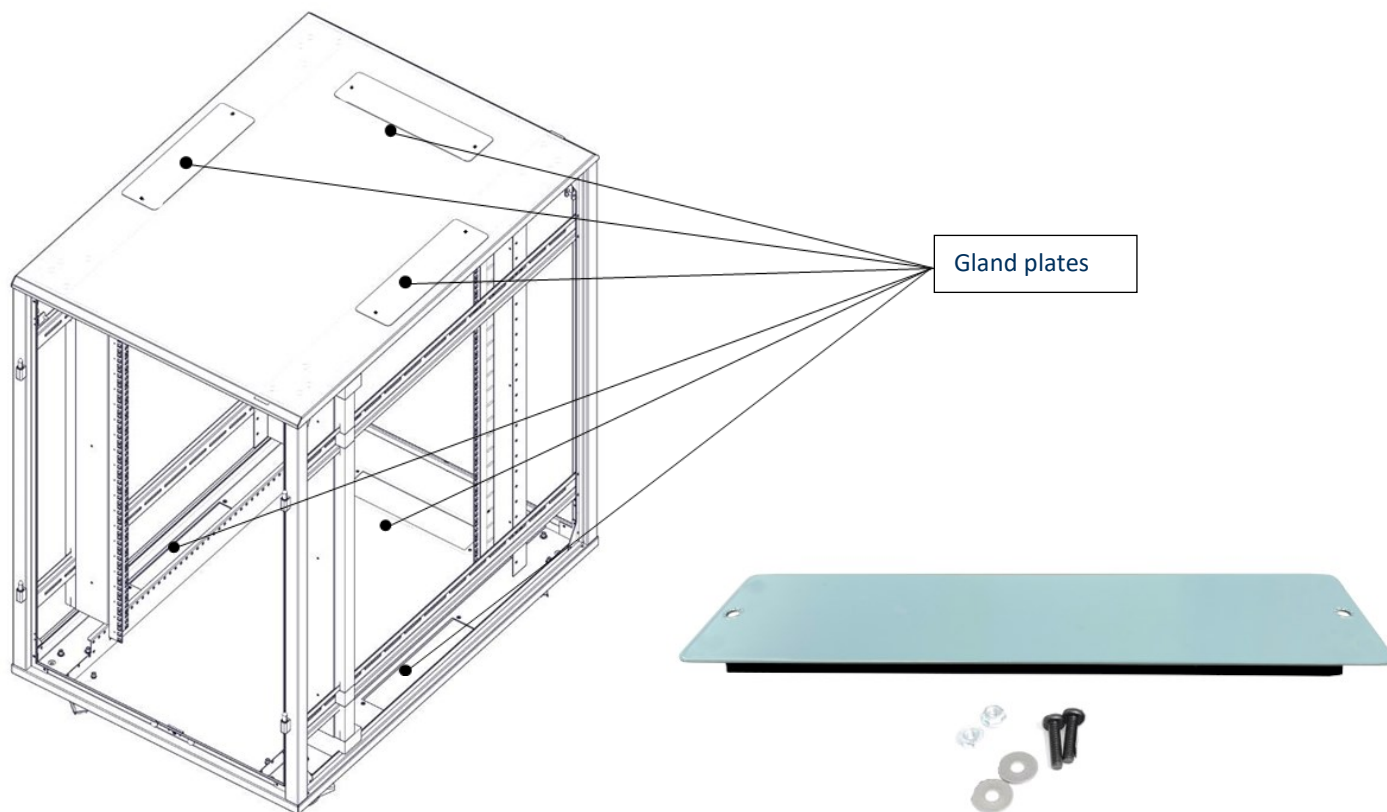
Put cabling through and evenly distribute it along the cable entry system to allow for the best sealing.



Installation

Gland plates

The EDGE-3 has 6 gland plates which are removable. It is advised not to remove the gland plates during operation as this will cause issues with air recirculation and potential hot spots.



To remove the gland plate unscrew using a Philips head screw driver while holding onto the nut to avoid dropping if removing from the top frame. Gland plates are put in tightly to create a seal so it can be stiff removing and place back in.

To ensure optimum running efficiency it is important that seal integrity is maintained by utilising either cable entry system (page 18) or other forms of cable grommets.

Installation

Extension Assembly kit

The EDGE-3 rear extension kit allows larger equipment to be put inside, giving an additional 200mm depth. It is fully retrofittable and will not adversely affect the performance of the cabinet.

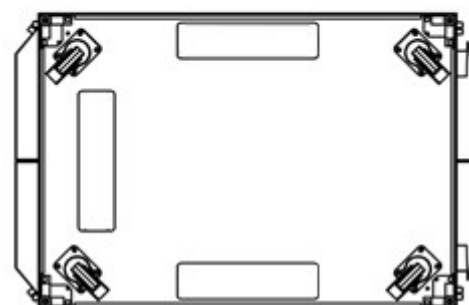
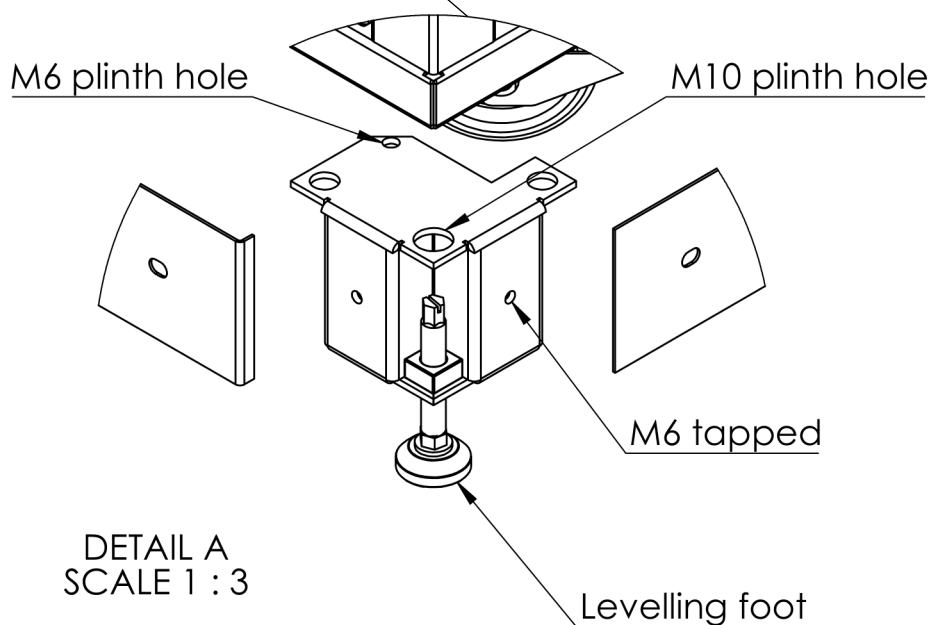
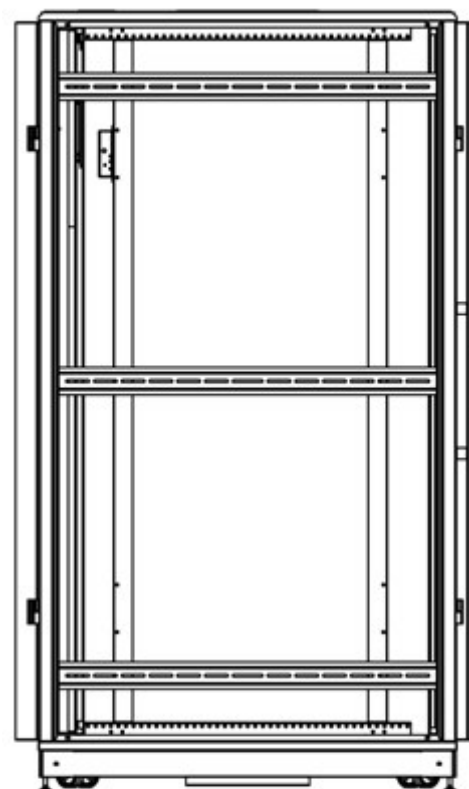


1. Remove the rear active doors, following instructions on page 16.
2. Remove original hinges on frame using allen key via relief in corners post (rear of hinge).
3. Fix 4x retainer brackets onto lid and base using m6 fixings.
4. Fit extension unit using M6 fixings supplied into 4x retainer brackets (lid and base).
5. Attach the active doors and use the extensions cables provided to accommodate the extended length.

Installation

Plinth Assembly Instructions

1. Remove the M10 allen key bolt and the M6 pozi nut and bolt from each corner of the base (note head of the M6 Bolt is located inside the cabinet).
2. Place the corresponding plinth corners (left hand and right hand) on each corner with the M6 bolt and nut and the M10 nut as per removal (make sure the levelling foot is attached to the plinth corner before fitting it onto the UCoustic base).
3. Once each plinth corner is fitted proceed to fit the external plinth panels using the M6 x 25 bolt onto a tapped hole on the plinth corner.
4. Unwind the levelling feet till the castors are floating.

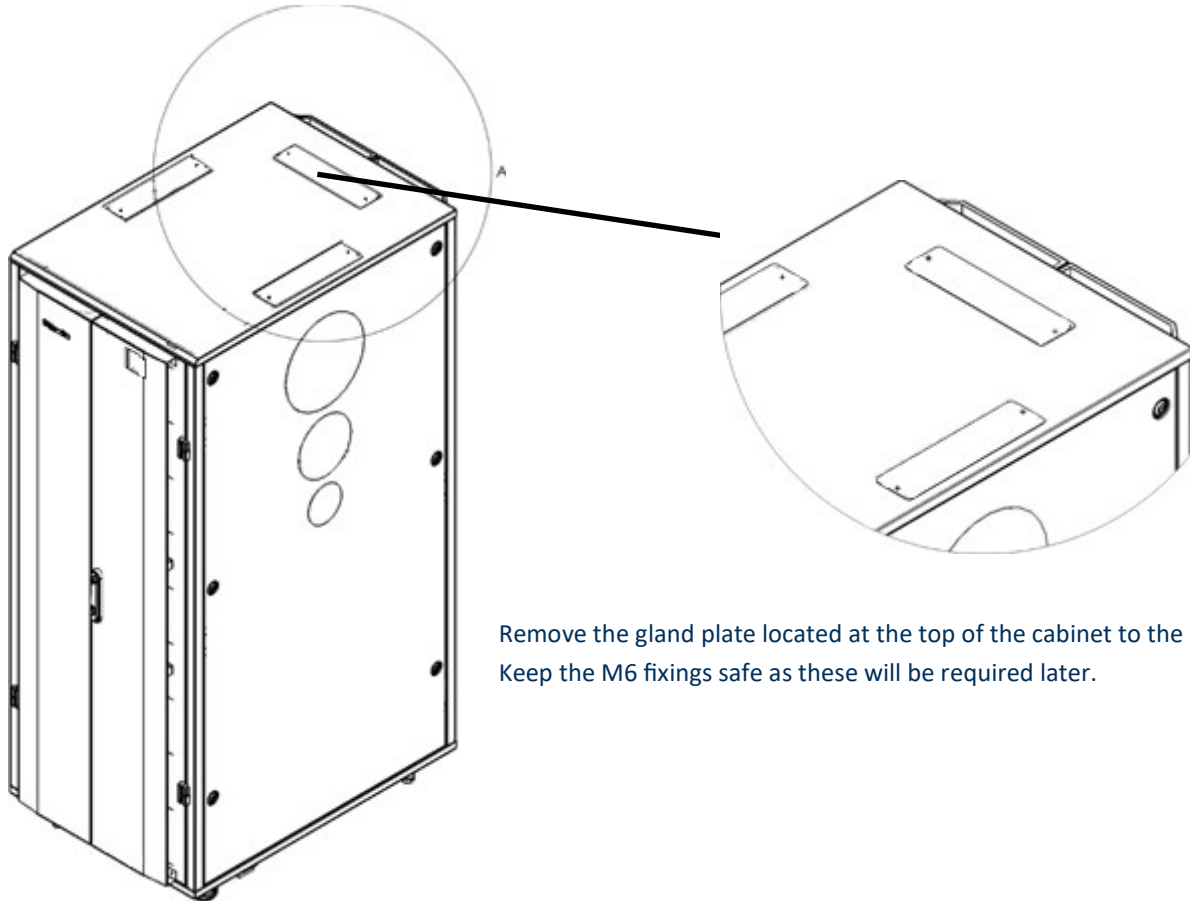


Installation

EDGE-3 DAX kit

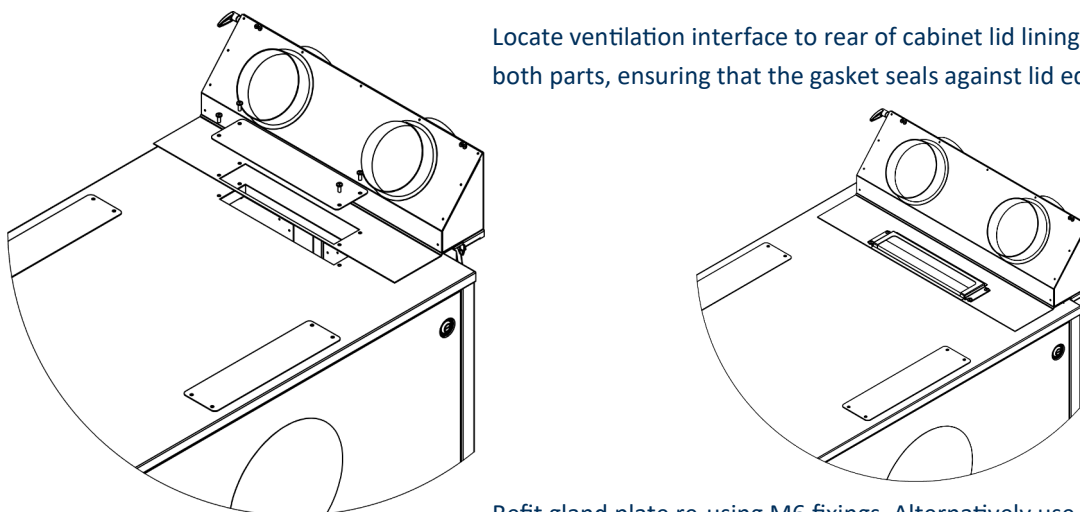
The EDGE-3 DAX 'Direction Airflow eXhaust' kit is available to control the hot airflow exhaust from the active rear doors. Please see data sheet for more information. Not available on 12U EDGE-3.

Stage 1



Remove the gland plate located at the top of the cabinet to the rear. Keep the M6 fixings safe as these will be required later.

Stage 2



Locate ventilation interface to rear of cabinet lid lining up entry holes in both parts, ensuring that the gasket seals against lid edges.

Refit gland plate re-using M6 fixings. Alternatively use the cable entry system, which will also assist clamping down of the retrofit ventilation interface.



EDGE Management System

'EMS'

Product User Guide

Product Description EDGE Management System (EMS)

The EDGE (EMS) is the hub of the EDGE System. It provides the means of connection to the dedicating incoming power source and Fan power distribution and control

The EMS is a networkable, environmental, monitoring and security product.

This following is a list of ancillary devices currently available to install

- Temperature sensors up to 4
- EC Fans up to 2
- Contact sensors up to 6
- Aisle containment door open/close
- UTelligent Locking
- LCD Alarm Screen



Quick starter guide

1. The EDGE Management System is delivered from USystems with default settings, please refer the EDGE Management System User Guide for these settings. These settings should be adequate for most installations, however adjustments can be made to suit the requirement.
2. The EDGE Management System (EMS) requires either 100-130V or 200-240V 50/60Hz dedicated input power source. (Refer to rating plate & model identification for details).
3. Once power has been applied to the EDGE Management System, the system shall initialise. The Active door fans shall run at full speed until the EMS has completed its boot up and started the control sequence.
4. The LCD screen will require boot up time and is communicating with the EDGE Management System via wi-fi, a delay of up to 5 minutes on boot up before communication has been established.
5. In order to use the WebUI (Web User Interface), an Ethernet cable from the EDGE Management System to your network is needed. Plug the Ethernet cable into the EDGE Management System RJ45 port and then to a live network port onto your own network. The network port on the EDGE Management System will light up to show it is live.
6. The default IP address to log on to the EDGE Management System is 192.168.0.10, please contact your network administrator if unable to load the log in screen.
7. The default login is 'admin' and the password is 'Admin12\$'
8. Accept the EULA to proceed onto the WebUI
9. The following pages detail modifying default settings on the EDGE Management System User Guide - Page 19 -21

WebUI 'Web User Interface' Overview

The EDGE Management System is an environmental, monitoring, security and networkable product, delivered with a default IP Address of 192.168.0.10 and a Net mask of 255.255.252.0

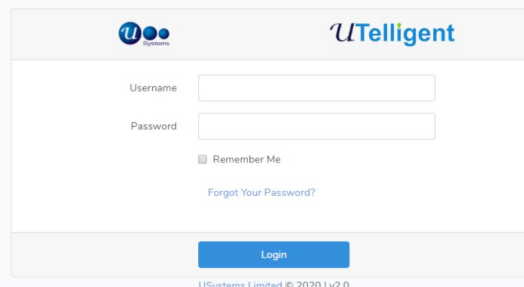
The WebUI can be accessed using the default IP address in the address bar of any browser from any type of device there is a default Administrative account which to login to requires the following credentials:

Default username: 'Admin'

Default password: 'Admin12\$' (case sensitive)

If unable to connect please contact the Network administrator to allow the use of this IP address or connect directly to the EDGE Management System via ethernet and adjust your IPv4 properties to match.

Once the EULA has been accepted it will redirect to the dashboard page once logging in successfully. By not accepting our EULA access will be denied the EDGE Management System software.



The screenshot shows the login interface for the UTelligent system. At the top, there are two logos: 'U Systems' on the left and 'UTelligent' on the right. Below the logos, there are two input fields: 'Username' and 'Password'. Under the 'Password' field, there is a checkbox labeled 'Remember Me' and a link that says 'Forgot Your Password?'. At the bottom of the form is a blue button labeled 'Login'. Below the button, the text 'USystems Limited © 2020 | v2.0' is displayed.

WebUI - Dashboard

Cabinet Status	
Cabinet Name	UMS359e39
Fan 1 - Status	OK
Fan 2 - Status	OK
Fan 1 - Speed	452 RPM
Fan 2 - Speed	461 RPM
Temperature Sensor 1	21 (°C)

UMS | UTelligent | Admin

Dashboard | Fan speed | Environment | Alerts | Reporting | Settings | User manual

USystems Limited © 2020 | v2.0

The dashboard is made up of different tables depending on your cabinet configuration.

Header

Select the Username icon to Restart, Upgrade, Remote support and Log out.

Restart - Selecting this will restart the EMS

Upgrade - This option is available to upgrade the EMS To use this an update file from USystems will be required

SupportMe! - This is to enable the VPN connection with USystems so that a remote support connection can be established. Once the EMS is restarted the VPN connection will be disabled, select the SupportMe! Button again to re-enable,

Log out - Selecting this will log the user out of the EMS and will return to the log in screen.

Menu

Left side of the dashboard is the menu with a list of different options these areas can be locked out for certain users - please see page 20 for user accounts.

Cabinet Status Table

Cabinet name: By default it is named as EMS followed by 6 digits from the MAC address - please see page 19 settings to change this. It is also the hostname for the device.

Fan Status: Displays the fan status and its value being either 'OK' or 'FAIL' - please see page 10 for fan alarm information

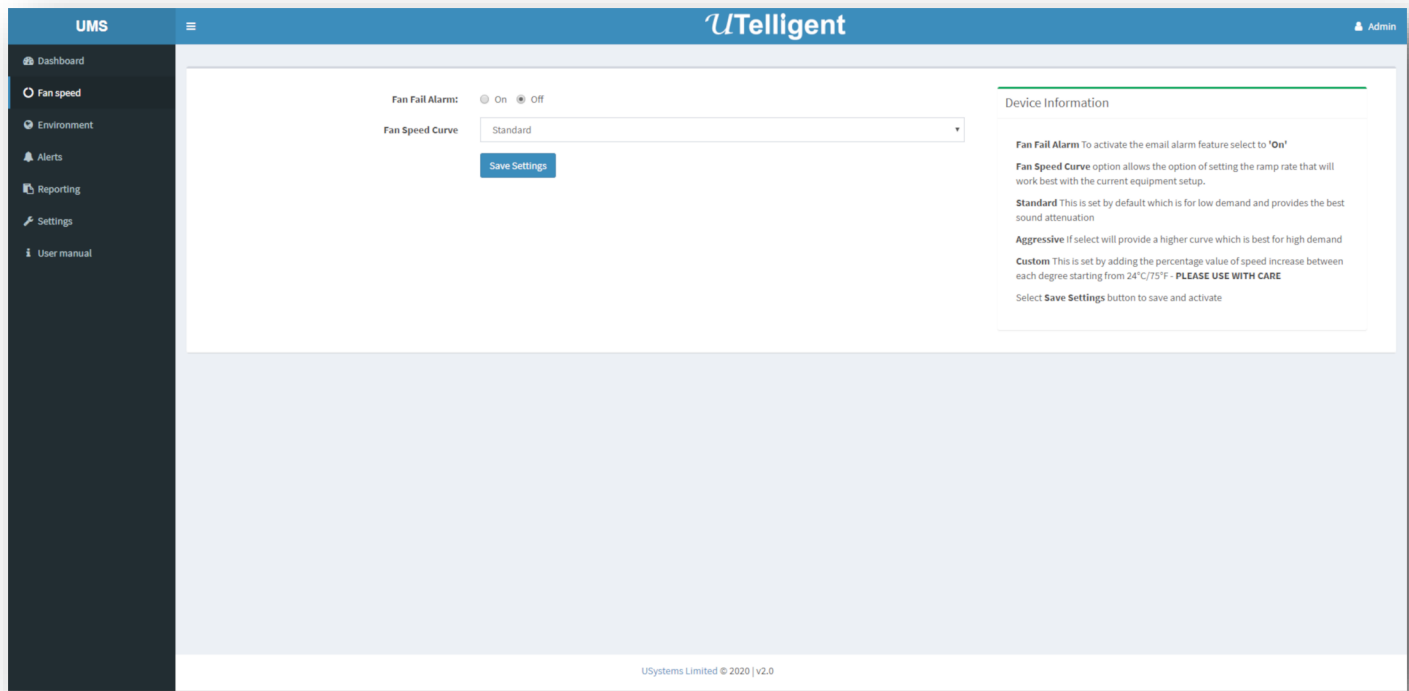
Fan Speed: Displays the RPM (Revolution per minute) of each fan

Temperature Sensor: The current temperature will be displayed along with the sensor location, it can be displayed in °C or °F Each sensor can be provided with a customer name, this can be done under **Settings - Sensor names**.

Digital sensors: Contact sensors will display if the cabinet is open or closed.

WebUI - Fan Speed

The Fan speed page will allow you to set an alarm if there is a Fan Fail.

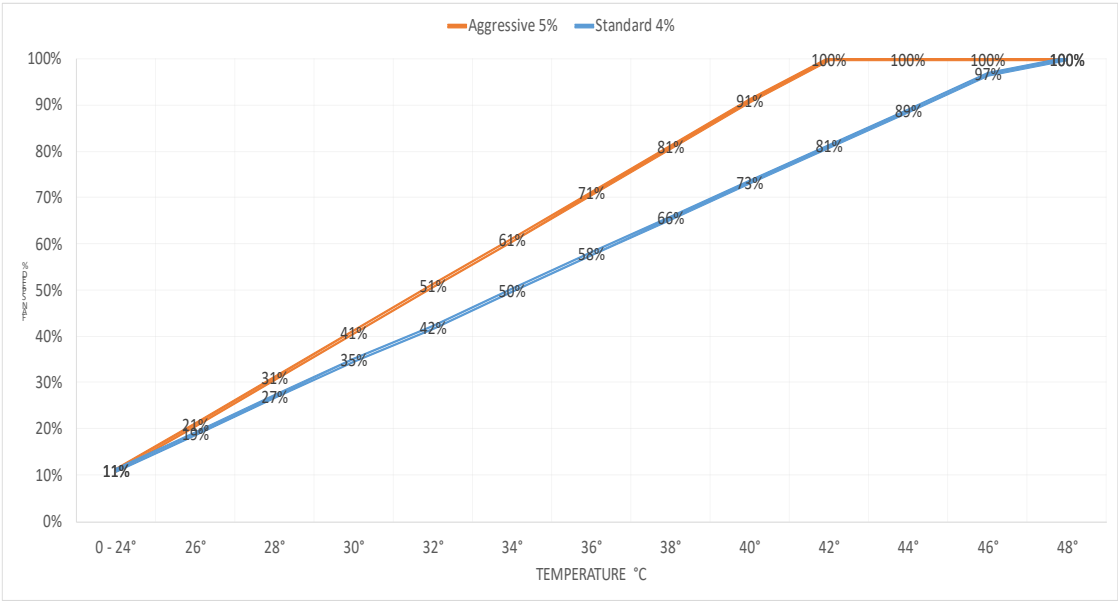


To enable an alarm, select Fan Speed from the left hand column. Select the ‘on’ button and enter at least one email address of those that need to receive a notification. See page 19 to set up SMTP settings (emails).

Fan Speed Curve should not be changed by anyone who does not understand ‘Ramp rates’ which should be set dependant upon the equipment being used inside of the cabinet.

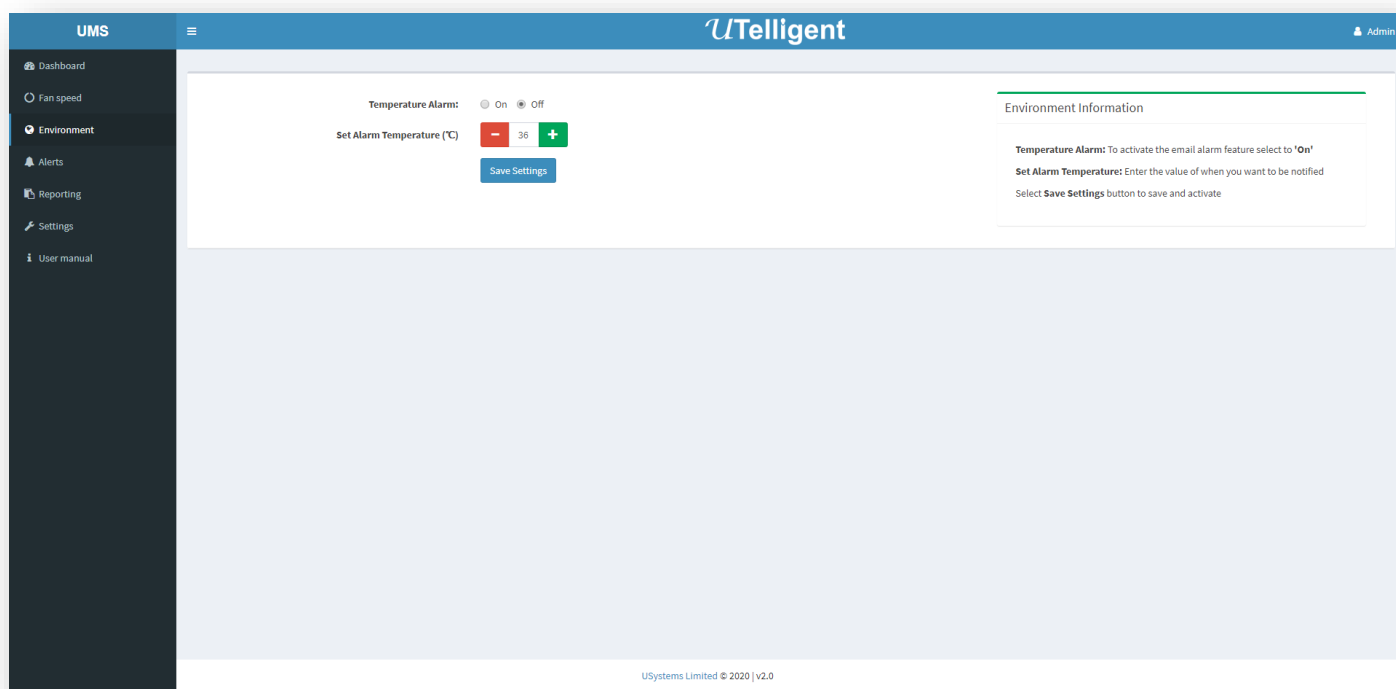
Ramp rate: Is the rate at which the fans speed up per degree Celsius from the Base speed. They will keep speeding up at this rate until they are running at 100% (10V) i.e. they are not capped. They will hit 100% at a temperature dependant on the ramp rate set. This does not require a restart it will change when selecting save the settings.

There will be 2 different **set** ramp rates which are listed in the table below and a custom option to change the ramp rate by increasing/decreasing the percentage of fan speed per degree.



WebUI - Environment

The environment page allows setting of alarms on over temperature. The Alarm will be set off if the temperature reaches the set threshold in degrees °C/°F—which can be changed either using the arrows provided or by manually entering it by selecting the text field in between the arrows.

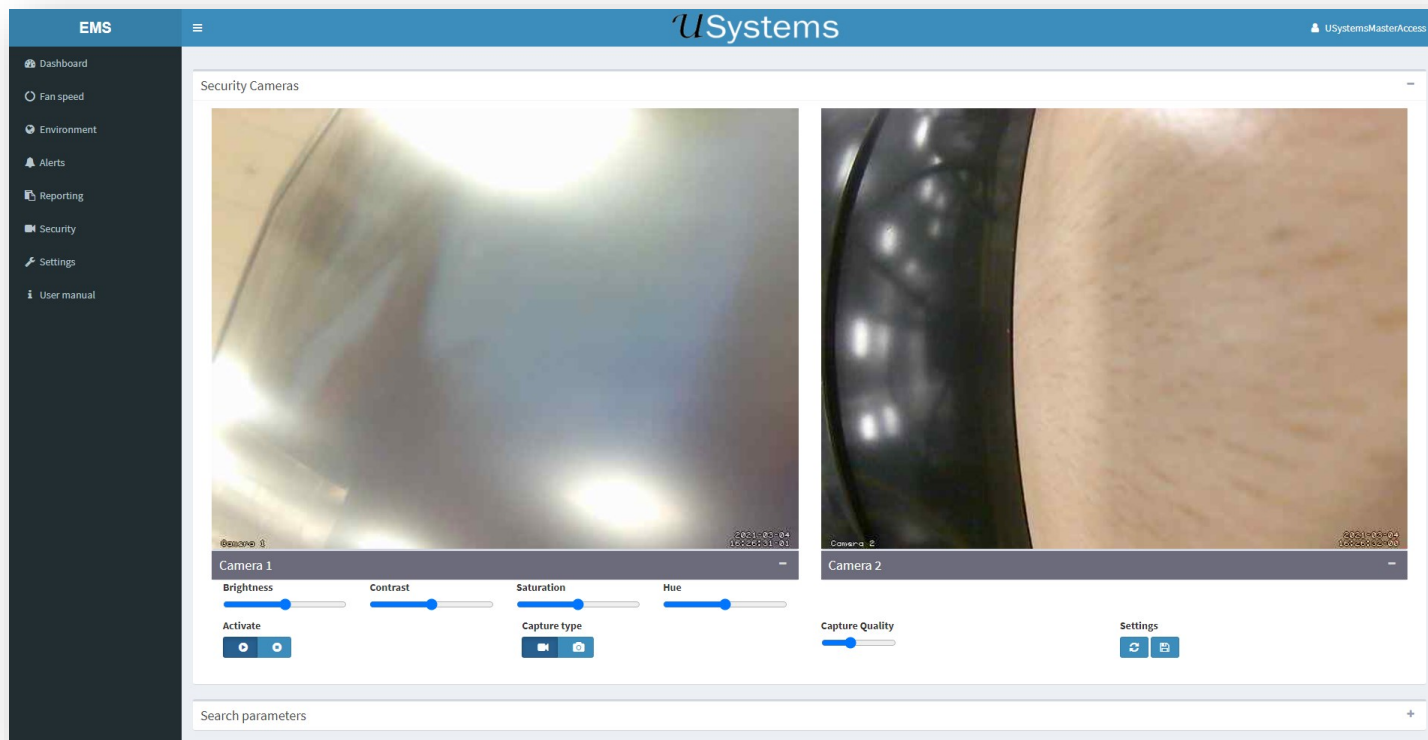


Click on Environment in the left hand column, select the 'on' button. Set the alarm temperature threshold to be notified of when temperature reaches the selected number. To receive email alarms See page 19 to set up SMTP settings (emails).

Click Save settings to set all changes

WebUI - Security

The Security tab is only activated if either a camera front and/or rear, or contact sensors have been added to the device manager.



Camera Settings

Brightness, Contrast, saturation and Hue can be adjusted per camera, this is accessed from the toggle below the camera feed.

To adjust the image without having to open the doors the camera/s can be activated using the “Activate” buttons.

Capture type will change whether a video or image is captured.

Settings can be saved or reset using the buttons.

Photographic Security Records

To view the photos/videos taken select the picture, the default view will show 12 images per page.

When selected these are the options available to use.

WebUI - Alerts 1

The EMS has an alert option which will alert on the date you select. When the Alert is triggered the LCD Display on your enclosure will change to Amber.

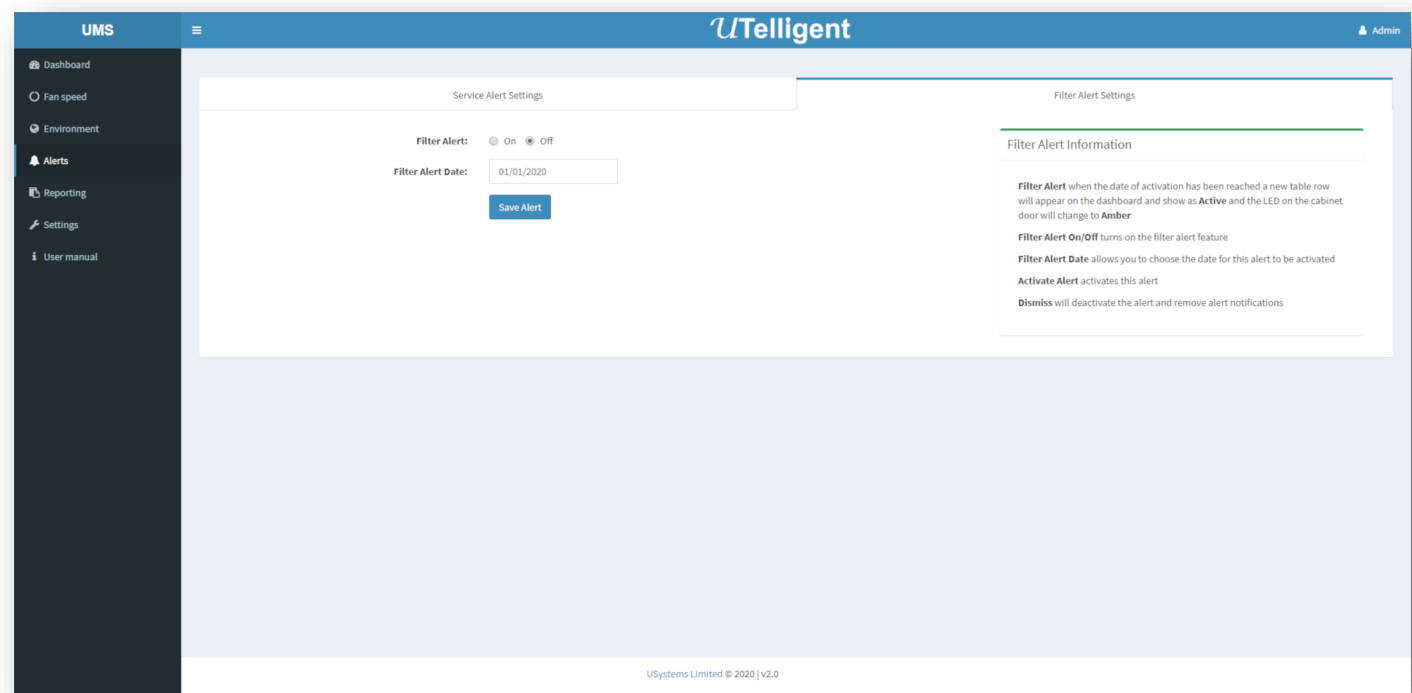
Service Alert

USystems are able to provide your enclosure with a service when ever you need. For more information on what is offered in a service please contact USystems.

To activate this option simple select the 'On' button and click on the date to choice or type it in yourself, then select save.

WebUI - Alerts 2

The EMS has an alert option which will alert on the date you select. When the Alert is triggered the LCD Display on your enclosure with change to Amber.



Filter Alert

Depending on the environment that the enclosure is situated could result in the enclosure absorbing dust so it is recommended to each customer to use a filter to prevent your IT equipment from unwanted material in the air. If your enclosure has a filter it is also recommend using this feature to notify alert when it may need cleaning or replacing.

To activate this option simple select the 'On' button and click on the date to choice or type it in yourself, then select save.

WebUI - Alarm Reporting

UMS U/Telligent Administrator

Dashboard
Fan speed
Environment
Alerts
Reporting
Security
Settings
User manual

Alarms Log Temperature Log Humidity Log Fans Log

Show 10 entries Search:

Date and Time	Alarm	Status
2020-07-09 07:47:09	FAN2	FAIL
2020-07-09 07:47:05	FAN1	FAIL
2020-07-09 06:41:14	HUMID1	FAIL
2020-07-09 05:20:17	TEMP3	FAIL
2020-07-09 05:20:17	HUMID3	FAIL
2020-07-09 00:15:13	TEMP4	FAIL
2020-07-09 00:15:13	HUMID4	FAIL
2020-07-08 04:14:54	TEMP3	FAIL
2020-07-08 04:14:54	HUMID3	FAIL
2020-07-08 01:21:39	TEMP1	FAIL

Showing 1 to 10 of 82 entries

Previous 1 2 3 4 5 ... 9 Next

Download Logs

Alarms Log Information

Details the alarms that have occurred during its operation

Filter Select the headers to filter the results. Show more records by selecting the records per page drop down. **Search** by entering the date and it will display all of the alarms of that given date

Download Logs will download a .XLSX or .CSV file of all of the alarms

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The Alarms Log report is a list of alarms recorded for up to 3 months. This includes Fan fail, access and temperature over threshold data, reports of the data are available to download onto a .csv spreadsheet.

The records may be displayed 10, 25, 50 or 100 per page.

Search by date and time using the same format from 'timedate' column.

WebUI - Temperature Reporting

UMS

Dashboard

Fan speed

Environment

Alerts

Reporting

Security

Settings

User manual

UTelligent

Administrator

Alarms Log

Temperature Log

Humidity Log

Fans Log

Show 10 entries

Search:

Date and Time	Temp. Sensor1	Temp. Sensor2	Temp. Sensor3	Temp. Sensor4
2020-07-09 10:30:38	21.8° C	22.3° C	22.4° C	22.4° C
2020-07-09 10:30:36	21.8° C	22.3° C	22.4° C	22.3° C
2020-07-09 10:30:33	21.8° C	22.3° C	22.4° C	22.3° C
2020-07-09 10:30:31	21.8° C	22.3° C	22.4° C	22.3° C
2020-07-09 10:30:29	21.8° C	22.3° C	22.4° C	22.3° C
2020-07-09 10:30:27	21.8° C	22.3° C	22.4° C	22.4° C
2020-07-09 10:30:25	21.8° C	22.3° C	22.4° C	22.4° C
2020-07-09 10:30:22	21.8° C	22.3° C	22.4° C	22.4° C
2020-07-09 10:30:20	21.8° C	22.3° C	22.4° C	22.4° C
2020-07-09 10:30:18	21.8° C	22.3° C	22.5° C	22.4° C

Showing 1 to 10 of 368,008 entries

Previous

1

2

3

4

5

...

36801

Next

Download Logs

Temperature Log Information

Details the temperature sensor recordings during its operation

Filter Select the headers to filter the results. Show more records by selecting the **records per page** drop down. **Search** by entering the date and it will display all of the temperature recordings over the given date

Download Logs will download a .XLSX or .CSV file of all the temperature logs

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The Temperature Log report is a list of temperature recorded up to 3 months. Reports of the data are available to download onto an .csv spreadsheet.

The records may be displayed 10, 25, 50 or 100 per page.

Search by date and time using the same format from ‘timedate’ column..

WebUI - Humidity Reporting

UMS UTelligent Administrator

Alarms Log Temperature Log **Humidity Log** Fans Log

Show 10 entries Search:

Date and Time	Humidity-Sensor1	Humidity-Sensor2	Humidity-Sensor3	Humidity-Sensor4
2020-07-09 10:30:38	63.8%	59.5%	59.2%	60.2%
2020-07-09 10:30:36	64.0%	60.5%	59.7%	60.1%
2020-07-09 10:30:33	64.0%	60.5%	59.7%	60.1%
2020-07-09 10:30:31	63.8%	60.8%	59.7%	60.1%
2020-07-09 10:30:29	63.8%	60.8%	59.7%	60.1%
2020-07-09 10:30:27	63.8%	59.5%	59.7%	60.2%
2020-07-09 10:30:25	63.8%	59.5%	59.7%	60.2%
2020-07-09 10:30:22	63.7%	60.5%	59.5%	60.0%
2020-07-09 10:30:20	63.7%	60.5%	59.5%	60.0%
2020-07-09 10:30:18	63.7%	60.5%	59.5%	59.2%

Showing 1 to 10 of 368,004 entries

Previous 1 2 3 4 5 ... 36801 Next

Download Logs

Humidity Log Information

Details the humidity sensor recordings during its operation

Filter Select the headers to filter the results. Show more records by selecting the **records per page** drop down. **Search** by entering the date and it will display all of the humidity recordings over the given date

Download Logs will download a .XLSX or .CSV file of all of the humidity logs

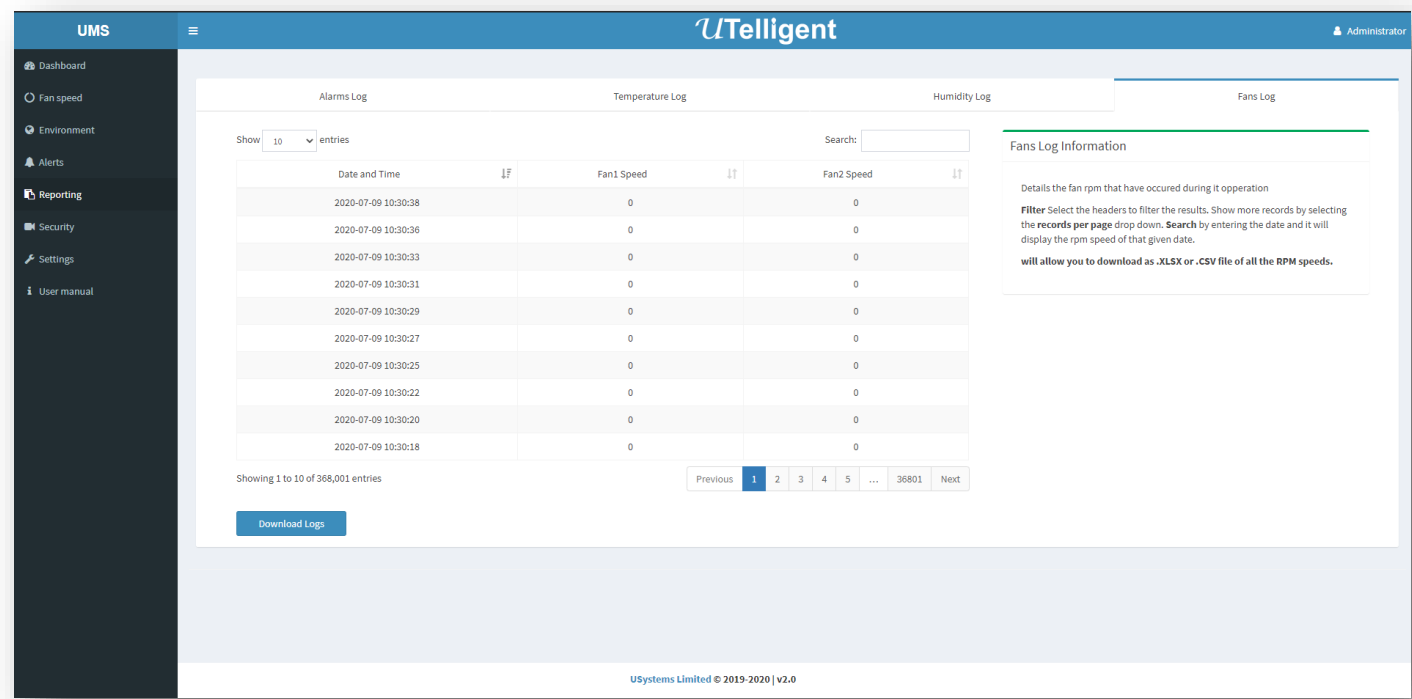
USystems Limited © 2019-2020 | v2.0

The Temperature Log report is a list of Humidity recorded up to 3 months. Reports of the data are available to download onto an .csv spreadsheet.

The records may be displayed 10, 25, 50 or 100 per page.

Search by date and time using the same format from 'timedate' column..

WebUI - Fan Reporting



The Fans Log report is the list of fans connected to the EMS and it’s RPM output recorded for up to 3 months. Reports of the data are available to download onto a .csv spreadsheet.

The records may be displayed 10, 25, 50 or 100 per page.

Search by date and time using the same format from ‘timedate’ column..

WebUI - Setting

Network Settings TAB

The default network settings are as follows:

Device name: EMSXXXXXX

DHCP: Set to 'Off'

IP address: 192.168.0.10

Netmask: 255.255.252.0

Gateway: 0.0.0.0

To change these settings select the text fields and adjust accordingly and then click Save Settings. If the IP address is changed reconnect using the new IP address after the EMS has been restarted. Do this by selecting restart from the power icon button on the top right of the screen, allow up to 3 minutes for it to power on fully with the new IP address. Type the new IP address into the browser.

NTP Server IP: To change to a different NTP Server enter it's IP Address and use the Save Settings button, a restart of the EMS is required to apply these settings.

MAC address: Displays device's MAC (Media Access Control) address. This cannot be changed.

Serial number: Displays the serial number assigned to the EMS

To change the date and time for your country select the drop down menu and select your time zone and restart the EMS for the setting to change.

SMTP Settings

This must be set to allow emails alerts/alarms to be sent.

Server address (IP/Domain): Add the IP or Domain of your email server

Username: Add the email address which will the alarms from

Password: Add the password of the email address

Make sure that the default admin email address is changed to the administrator who is going to be receiving emails to change passwords of users that request a forgotten password.

To make sure that the setting used are correct select the 'Save Settings' button.

Use 'Send Test Email' to test if the settings are correct and working with the EMS. A email address must be entered to send the test email too.

To use the Send Test Email and alarms select the 'Add new email'. Select the alarms for each email address entered.

Device manager

This tab details all devices that are attached to the EMS. When adding new devices to the EMS cross check in device manager that they are displaying correctly.

Hardware Version - This displays the hardware version of the EMS. This may be required for support.

Software Version - This displays the software version of the EMS. This may be required for support.

Device manager

Hardware version: Displays device's hardware version

Software version: Displays the device's software version

Default Units: Change between Metric to Imperial

Servo: If 1 or 2 servos are connected to the EMS this must be selected to 'ON' for the EMS to control the servos

Universal U1 - U4 Input Type: Select the sensor type that is added to these ports on the EMS

IO 1 - 6 Sensor Type: Select which digital sensor is plugged into the EMS

Camera: Enable to active.

Camera 1: Select the camera from the drop-down menu, if unable to find any make sure that the USB cable from the camera is plugged into any of the USB ports.

Camera 2: Select the camera from the drop-down menu, if unable to find any make sure that the USB cable from the camera is plugged into any of the USB ports.

UTelligent Locking Address: Add the IP address of the UTelligent locking system into the text boxes and selecting the save icon when complete. This will then display on the dashboard.

User Accounts

On first login to the device it will have a default login ('Admin') and password ('Admin12\$') it is recommend to change the Admin login password.

To add a new user select the Add User button at the bottom of the table then fill the fields with the required information. .

There are 5 levels of access -

- R (Read-only user) can only access DASHBOARD TAB

- RC (Read-only + camera user) can only access DASHBOARD + Camera TAB

- W (Write user) access to all TABs other than Camera and EMS settings TAB

- WC (Write and Camera user) can access almost all TABs other than EMS Settings TAB

- S (Super-user) can access all TABs

Once completed select 'Save Settings'.

Passwords must be a minimum of 8 characters with at least 1 number and 1 upper case letter.

If the account is not required there are two options depending on the situation. If the user is no longer needed for the foreseeable future the account can be removed by selecting the bin icon in the users row. The other option is to deactivate the account in the event that it needs to be suspended, this is achieved by selecting the tick icon on the users row. To reactivate it, select the cross icon. These options can only be performed by the admin account or super user.

Change the email address of the account by editing the text field under email and select save icon when finished, this is the same for the Access level. Enter the user rights by the corresponding letters list in on information panel and selecting save once completed, a confirmation pop up will appear if correct. If incorrect entries have been entered a different pop up will appear showing error inputs.

Sensor Names

The table displays each sensor assigned to the EMS and provides the ability to name each device. To change the name, select the text field and type what is required. A good example would be to name a contact sensor in the front to 'Front door' which will show on the dashboard.

SNMP

Trap Receiver

Specifies the destination to which the EMS should send SNMP traps.

Type

The type of trap to send. The EMS sends SNMP v2c Inform traps.

Trap Receiver IP Address

Enter the IP Address of your SNMP Trap Receiver.

Leave blank to disable traps.

Trap Community

Enter the community string to be sent in SNMP traps.

Actions

Select the save icon to save the settings.

SNMP v3 Users

The table defines users who are granted access to the EMS for SNMP operations. The details of the relevant user should be entered into the SNMP client application in order to access the EMS.

Name

The SNMP user name. Two users are defined:

ems-ro for read-only access;

ems-rw for read-write access.

Level

The security level to be used for SNMP operations. This can not be changed from the pre-set authentication and privacy.

Auth Protocol

The protocol to be used when authenticating the user. Select the from the list.

Authentication Passphrase

The passphrase required to authenticate SNMP requests for this user. An authentication passphrase is required.

Leave the passphrase blank to deny access for the user.

Priv Protocol

The protocol to be used for data privacy. Select from the list.

Privacy Passphrase

The passphrase to be used for data privacy. If left blank the Authentication passphrase will be used.

Actions

Select the save icon to save the settings for the SNMP v3 user.

Note: when changing any user parameters, please also type an authentication passphrase into the field provided, even if a passphrase is already set, otherwise access will be disabled for the user.

SNMP v2c Community Strings

Community strings are used to grant SNMP v2c access to the EMS.

Permissions

The level of access to be granted for the community:

- Read-only the rocommunity for read-only access;
- Read-write the rwcommunity for read-write access.

Community String

The name of the community.

Leave blank to disable this type of access.

Actions

Select the save icon to save the settings for the SNMP v2c community.

Further Documentation

For additional information, please refer to the below. Available through your USystems representative, or our central inquiries line at sales@usystems.com

Complete Product Range

Available at www.usystems.com

Operations and Maintenance Manual

Please contact sales@usystems.com

Troubleshooting Guide

Please contact sales@usystems.com

Product Datasheet

Available at www.usystems.com



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Nahda 1, Dubai, United Arab
Emirates

Tel: 97 155 998 1198

North America

10 Glenlake Parkway, Suite 130
Atlanta, Georgia, 30328, USA

Tel: 404 334 3607

India

207, 2nd Floor Regus Supreme
(Jayanagar), 44/1, 16th Cross,
Jayanagar, 7th block (west), KR Road,
Bangalore - 560070, India

Tel: 080 6185 2022

Further Documentation

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