The background of the cover is a collage of images related to a laboratory or medical setting. It includes a woman in a white lab coat and safety goggles, a woman in a white lab coat holding a beaker with blue liquid, a man in a blue lab coat and mask, and a woman in a blue lab coat. There are also abstract blue and white molecular or network diagrams overlaid on the collage. A large red and blue diagonal graphic element runs across the cover.

*Medisafe* PLUS

Powered by



# USER GUIDE

## **Acknowledgement**

Thank you for purchasing this Avem Quirks Medisafe Plus Refrigerator. This refrigerator is purpose-built, for the storage of medical vaccines. We recommend that you read this user guide before operating the Medisafe Plus refrigerator and retain it for future reference.

### **Contact Information**

Should you require assistance, guidance or technical support, please contact:

**Avem Quirks Australia Pty Ltd.** (Head Office) 9 Business park drive,  
Lynbrook VIC 3975

**Phone:** 1800 658 120

**Email:** servicedesk@avemquirks.com.au

### **Medisafe Plus Warranty**

Your new Medisafe Plus vaccine refrigerator is covered by a 24-month warranty on parts and labour. Avem Quirks Australia will repair or replace, at our discretion, any component found to be faulty in workmanship or operation for a period of 24 months from the time of installation.

**Avem Quirks Australia would like to stress the importance of reading all provided documentation and instructions PRIOR to the storage of any vaccine or product stock.**

Full instructions on the safe and appropriate operation of your unit, along with telephone support, are available in order to ensure that your new Medisafe Plus refrigerator operates efficiently and to its capacity.

Failure to follow instructions, especially involving setting of cabinets and start up, may result in the loss of or damage to valuable stock through incorrect operation of the unit.

**Avem Quirks Australia cannot be held responsible for the loss of or damage to stock.**

Please refer to the *National Vaccine Storage Guidelines: Strive for 5* (available from the Department of Health at <http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/provider-store>) for further information about vaccine storage management or contact your local State/Territory health authority (contacts provided on Page 16). **Avem Quirks** National Service Support Line: **1800 658 120**

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## Getting Started



If the vaccine cabinet was shipped to you, please wait at least three hours prior to turning it on. This will allow the oil in the compressor time to settle after shipping.



**Avem Quirks Medisafe Plus refrigerators are powered by electric current, which can cause serious injury. Any installation, cleaning, or troubleshooting must be conducted with the electrical power source disconnected from the unit.**

- **The following precautions should be taken while the unit is in operation:**
- Ensure the appropriate power is supplied to the unit. Note: Avem Quirks Medisafe Plus units are designed to operate at 220-240V, 50Hz.
- Do not plug several appliances into the same multiple receptacle
- Electrical components should not come into contact with water
- Ensure the power cord is not damaged. If the cord becomes damaged, it must be replaced by the manufacturer, a certified service agent or qualified service professional.



**It is strongly recommended that any servicing of the unit be performed by Avem Quirks Australia.**

### Installation

- Place the Medisafe Plus refrigerator in a location with a flat surface that is approximately level, with reasonable clearance from any walls, and without exposure to direct sunlight.
- Allow clearance to the right, left, back and top. This will reduce power consumption and allow the internal cooling system to function correctly. The unit is not to be placed in confined areas where air flow and heat dissipation are restricted.
- Ensure that the appropriate power is supplied to the unit. Note: Avem Quirks Medisafe Plus refrigerators are designed to operate at 220-240V, 50Hz. National and local codes provide specific electrical and mechanical installation requirements and recommendations covering equipment and equipment wiring.
- Plug in and turn on the power to the Medisafe Plus refrigerator. Ensure the power point is secure, that the refrigerator cannot be accidentally unplugged or switched off.



**When the power is first turned on, the Min-Max temperature display will show an alert “PF” flashing on the display. This informs the operator there has been a loss of power and can be acknowledged by pressing the red “set” button on the Min-Max display.**

### Basic Operation

- The power failure alert “PF” should be acknowledged by pressing the red “set” button on the Min-Max temperature display.
- The Medisafe Plus refrigerator is pre-set for operation. No buttons on the controller are to be touched except the red “set/mute” button, used to silence the audible alarm.
- Alarm Mute Button

### Stocking the Medisafe Plus Refrigerator

The Medisafe Plus vaccine refrigerator is designed to maintain a uniform temperature inside the cabinet. To do so, sufficient air flow is required to prevent “cold spots” from forming. Thus, it is important that an appropriate level of care be taken in stocking the refrigerator.

- Cool the vaccine refrigerator before stocking with vaccine. Avem Quirks Australia recommends allowing the refrigerator to run for at least 6 hours prior to loading with vaccines.
- Distribute stock evenly throughout the refrigerator.
- Ensure vaccines with the shortest expiry are stored at the front of the refrigerator.
- DO NOT place stock directly against the evaporator plate, at the rear of the refrigerator. This could cause the stock to freeze.

- DO NOT place large cartons inside the refrigerator (i.e. at the bottom of the cabinet). Remove smaller boxes from the carton and place them evenly spaced on the shelves.
- Some vaccines are sensitive to ultraviolet (UV) light. Please check the specific vaccine storage guidelines before removing vaccines from their boxes.
- If trays are used, ensure they are made of plastic, with holes to allow for sufficient air flow, and spaced evenly on the shelves.
- DO NOT overstock the refrigerator.
- If very few vaccines are stocked, thermal mass (such as cooled water bottles) should be added to the refrigerator in areas of open space.

### Silencing the alarm

- The cooling system of the Medisafe Plus refrigerator is controlled by an electronic controller, incorporating an audible and visual alarm, should the cabinet temperature fall or rise outside the specified range (+2 to +8°C). This is likely to occur during the first cooling cycle and may occur if the door is left open for an extended period of time.
- *To silence the alarm:* press the **set/mute** button on the electronic controller.



**When you first turn the cabinet on, if it does not reach a temperature below 8 degrees within 10 minutes, it will alarm. This is a normal function. All the operator is required to do is press the *set/mute* button to silence the alarm and restart the cooling process. Avem Quirks National Service Support Line: 1800 658 120**

### Temperature Control System:

- This highly accurate electronic control, located in the top right of the control panel (pictured below), incorporates a temperature probe and thermostat.
- A temperature probe measures the air temperature in the cabinet.
- The electronic controller is programmed to the required temperature parameters (+2 to +8°C).
- The controller cycles the refrigeration system to maintain the air temperature inside the cabinet, within the required parameters.

Should the temperature of the cabinet fall or rise outside the set parameters, the controller will trigger both an audible and visual alarm (the digital display will flash –“LO” for below set parameter or “HI” for above set parameter).

A suitable delay (5-10 min.) is programmed into the system to prevent unnecessary false alarms (such as door being open for extended periods).

If an alarm condition occurs, press the **alarm mute button** to silence the audible alarm.



The electronic controller is pre-programmed, during the manufacturing process.

The only button the operator is required to press is the **set/mute** button. If the cabinet alarms, you can press this to silence it. Any reprogramming of the controller must be done by a person approved by Avem Quirks Australia.

When the cabinet is first powered on, if it does not reach a temperature below +8 °C within 10 minutes, it will alarm. This is a normal function. All the operator is required to do is press the **set/mute** button to silence the alarm and restart the cooling process.

If an alarm condition has occurred, please allow 10-15 minutes for recovery.

Should you experience any issues with the Medisafe Plus refrigerator maintaining temperature within the set parameters, please contact **Avem Quirks National Service Support Line: 1800 658 120**

## Min-Max Temperature Display

- The top left display is the minimum and maximum temperature recorder. This displays the current air temperature inside the cabinet, and also provides the user with the minimum and maximum air temperatures reached inside the refrigerator since the last reset.
- **To display the minimum air temperature** the cabinet has reached, since the last reset, press the **min** button on the Min-Max display, identified with a 'down' arrow. The temperature will flash for several seconds, then the display will return to the current air temperature inside the cabinet.
- Similarly, **to display the maximum air temperature** the cabinet has reached, since the last reset, press the **max** button on the Min-Max display, identified with an 'up' arrow. The temperature will flash for several seconds, then the display will return to the current air temperature inside the cabinet.
- **Please Note:** *The maximum temperature will rise if the door is left open for an extended period of time.*
- **To reset the Min-Max display**, press and hold the red **set** button for approximately 5 seconds. The display will show the number of hours that have been logged since the last reset, then "rE" will be shown on the display to confirm all values have been reset.



**It is essential that the reset button is pressed before leaving the premises to ensure a true reading is viewed the following morning.**

- (Some regulations governing vaccine storage may require you to reset the display more frequently than once daily, please check with your State/Territory health authority for further information).



**The current temperature before pressing the re-set button should be between the required temperatures of +2°C to +8°C.**

# AQ Box –Cloud Based Temperature Monitoring Device

## LOGGING IN

- Open up Google Chrome, Microsoft Edge, Internet Explorer, Fire Fox or Safari



- In search area at the top of the page type – <http://aqbox.avemquirks.com.au/login>



- Type in your email address and the password your requested on your subscription form and press login

Please sign in to continue!



**Login**

[Forgot Password?](#)

From here you will go to the front page

On the left of the page are “TABS” to manoeuvre or by using the dropdown “Updated Now” area of each box to select the device

1. **DASHBOARD** – give an overview of the monitored devices
2. **DEVICES** – if you have multiple devices this is where you can choose which device to view.
3. **USER SETTINGS** - this is where you can add or delete notification responses and who receives them and how often. Also allows the user to manage passwords
4. **REPORTS** – this is where you view and download the monitored device temperature history and fault reports
5. **LOGOUT** – this is to logout as a user

- DASHBOARD
- DEVICES
- USER SETTINGS ▲
- CHANGE PASSWORD
- NOTIFICATIONS
- REPORTS ▼
- LOGOUT

## USER SETTINGS

Under the USER SETTINGS tab here is how you can also manage passwords and notifications

- Change Password – modify/reset passwords
- Notifications – view modify / delete

Manage Notifications

Show 10 entries

User	Group	Device	Type	Template	Options	Modify	Remove
DEMO AQ BOX - aqdemobox@gmail.com	N/A	Avem Office Test Fridge	Email	Default Template	<ul style="list-style-type: none"> <li>• Inactivity timeouts</li> <li>• Power faults</li> <li>• Battery faults</li> <li>• Temperature exceeds max</li> <li>• Temperature exceeds min</li> <li>• Temperature probe faults</li> <li>• Remind me every 15m</li> </ul>	Modify	Remove
DEMO AQ BOX - aqdemobox@gmail.com	N/A	Avem Office Test Fridge	Email	Default Template	<ul style="list-style-type: none"> <li>• Inactivity timeouts</li> <li>• Power faults</li> <li>• Battery faults</li> <li>• Temperature exceeds max</li> <li>• Temperature exceeds min</li> <li>• Temperature probe faults</li> <li>• Remind me every 15m</li> </ul>	Modify	Remove

Showing 1 to 2 of 2 entries

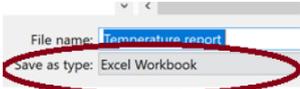


1800 658 120

## Running Reports

### Printing the Report

- Once the report has been generated – go to the end of the report and click on the “blue” highlighted link - “Click here to print report”
- Choose the printer that you want to print to and click print.
- You can also export your file and save as excel. Click on the blue highlighted link “Click here to export csv” Once the file has downloaded save the file to your computer but change the file type to EXCEL not CSV.



Reports can be exported to csv and saved as excel files  
or  
Printed directly from your computer



AQ Temperature Monitoring  
Allow you to quickly and easily monitor your Assets

Search

Faulty Temperature(s) Report

### Faulty Device Temperature Report

© Data between 2018/04/01 00:00 - 2018/04/10 00:00  
Generated at 2018-04-10 14:15:59

#### ELDERS ROCKHAMPTON

Device	Address	Number Low Temperature Fault(s)	Number High Temperature Fault(s)	Number Ideal Temperature(s)
ELDERS ROCKHAMPTON	127 Gladstone Rd, Port Curtis Rockhampton, QLD, Australia	0	0	26200

## Running Temperature Reports

### Running a Temperature Report

- Under Report choose - “Device Temperature”
- Select the Device in the drop Down Box
- Choose the “From” date and time
- Choose the “To” date and time
- Choose the “Reading every (minutes)” – this can be from 1 – 99 minutes

Once all parameters are set click the “Generate” button and the report will generate in the background

REPORTS ▲

DEVICE TEMPERATURE

Pixel Temperature Monitoring  
Allow you to quickly and easily monitor your Assets

Search

Device

From

To

Reading every (minutes)

Generate

## TROUBLESHOOTING

<p>Service should be performed only by qualified maintenance or refrigeration mechanics. For assistance, please contact Avem Quirks Australia. Issue</p>	<p>Further Information / Action to be taken</p>
<p>Refrigerator will not run/start after delivery</p>	<p>Please Check that appropriate power is supplied to the unit. Ensure the power plug is in the ON position. Before turning on check to see if it is safe! Check fuses from main power supply.</p>
<p>Why is my Fridge alarming when I turned it on?</p>	<p>When you turned on your fridge, it is not inside the pre-set temperature range of between +2c &amp; +8c. You can press the "Red Mute" button on the controller or the Set button on the Min Max display to silence the alarm. The fridge will continue to come down into range.</p>
<p>Temperature is too low</p>	<p>Check that there is sufficient air flow inside the refrigerator cabinet; that there are no large boxes or trays, stock is evenly distributed throughout the shelves, and there is space between stock and the evaporator plate at the rear of the cabinet.</p>
<p>Temperature is too high</p>	<p>Ensure that the unit is not located in direct sunlight, or in an area where the ambient temperature is above 30°C. Check the condenser coil (located at the back of the unit) to ensure that air flow and heat dissipation are not restricted. Check that the door has not been left open. Check that the seal has not been damaged, allowing cold air to escape from the refrigerated cabinet. If a new seal is required, please contact Avem Quirks Australia.</p>
<p>In case of a power outage, how long will my Medisafe Plus fridge stay cold?</p>	<p>There is no determinable time frame for this and will depend on variables such as, current stock levels in the fridge as body mass will hold temperature for longer periods, and the current room temperature. It will also vary We recommend that you are familiar with the Australian guidelines for Vaccine Storage, strive for 5, and that your cold chain management system accords with guidance it provides. For more information about correct storage of Vaccine, please contact one of our experienced support staff. Strive for 5 guidelines can be downloaded here - <a href="http://www.immunise.health.gov.au/">http://www.immunise.health.gov.au/</a>.</p>
<p>My unit needs to be serviced, how do I arrange this?</p>	<p>Please call our National Service number of 1800 658 120 and provide the Serial number of your Medisafe Plus fridge and one of our experienced service technicians to assess and repair your equipment.</p>
<p>What is the recommended temperature range for my Medisafe Plus Fridge?</p>	<p>The National Vaccine Storage Guidelines are outlined in the Strive for 5 initiatives. This recommends that vaccines be kept between +2° and +8° to reduce the chance of product spoilage. We recommend you read and familiarise yourself with these guidelines via the links below:</p> <p>Immunise Australia Program Website: <a href="http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/IMM77-cnt">http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/IMM77-cnt</a></p> <p>Strive for 5 PDF: <a href="http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/D7ED A378F0B97134CA257D4D0081E4BB/\$File/strive-for-5-guidelines.pdf">http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/D7ED A378F0B97134CA257D4D0081E4BB/\$File/strive-for-5-guidelines.pdf</a></p>

How do I view the data from the new AQ Box –Cloud Based Temperature Monitoring Device	On arrival of your new Medisafe Plus fridge the AQ Box –Cloud Based Temperature Monitoring Device is already installed but will need to be set up with your Email and SMS capabilities. Please complete the Sim Product Registration_Subscription Form that has come inside the fridge and resend the completed form, back to <a href="mailto:medisafe.alert@avemquirks.com.au">medisafe.alert@avemquirks.com.au</a> . Our Medisafe Plus Plus team will set this up to allow you to view the data via the cloud. We will also reply when this has been completed.
AQ Box will not display data	Please call our National Service number of 1800 658 120 and we will troubleshoot the issue for you. If we cannot assist at this time, we will send one of our Technicians to assist on site to repair this issue.
Can the customer obtain their own sim card	The answer is NO. The Sim card that is placed inside the AQ Box –Cloud Based Temperature Monitoring Device has a serial number linked to an Avem Quirks software license. Replacing this with another is not registered, therefore will not be seen when viewing the graphs via the cloud.
What happens if I have forgotten my password	Please send an email to <a href="mailto:medisafe.alert@avemquirks.com.au">medisafe.alert@avemquirks.com.au</a> and request a new password for your email login
Why doesn't the Map display correctly where the <b>AQ Box –Cloud Based Temperature Monitoring Device</b> Box is located	This is because the <b>AQ Box –Cloud Based Temperature Monitoring Device</b> Sim card “pings” a location from the nearest Optus receiver station
If power is lost in the fridge will the AQ Box continue to send data to the cloud	Yes, this AQ Cloud Based device has an 8hr battery backup to ensure this continues to send data to the cloud. You will still be able to view the data via a computer, smart phone, tablet etc providing you have internet connection.
If the Optus Sim signal is down will the AQ Box continue to send data to the cloud	Yes, the data will “cache” store data and will send all lost data to the cloud when the signal is restored The sim has capabilities to store up to 14 days' worth of data.
If the Optus Tower is down and the Power is out will the data still be able to be sent to the cloud	Yes, the Sim card store data up to 14 days so when the Optus tower is back on line the data will be sent to the cloud. The AQ Device will continue sending data to the cloud until its own battery backup is fully exhausted. A battery pack or UPS is a best solution to run the fridge which will also recharge the AQ Device as well
Can additional features be added to the AQ Box	We are continually looking at all options including adding additional probes to monitor compressor irregularities / door alarms / strobe lighting for the deaf, and may other features as needed.
Can 2 fridges be connected to the AQ Box –Cloud Based Temperature Monitoring Device	No, not currently
Can the customer buy more GLYCEROL B.P in case of a mishap	Yes, the customer can acquire at most local pharmacies Please note they are best to call our service team as this means the “putty/Sealant compound” has come away from the Vial bottle and will be replaced (100mL bottles available at most Pharmacies \$5.00)
What is DASHBOARD when viewing via the Internet	This screen provides an overview of the monitored device or devices assigned for you to view
What is USER SETTINGS when viewing via the Internet	This is where you can add or delete notification responses and who receives them and how often. Also allows the user to manage passwords

What is REPORTS when viewing via the Internet	This is where you view and download the monitored device temperature history and fault reports
What is the ADMIN TAB when viewing via the Internet	<p>Add Device –System Administrator user –adding device</p> <p>Modify the device –This is only for approved users –it will enable added features or change settings</p> <p>Add Users –Add a standard or System Administrator user</p> <p>Manage Users –Change/Delete user contact or select level of access</p> <p>User Password –Change password by user –System administrator rights needed</p> <p>Add Group –and a group to manage multiple devices</p> <p>Manage Groups –this is where you manage the email notifications and who can have authority to view devices -if you have multiple devices</p> <p>Add Notification –add what information is sent on the notification and how often</p> <p>Manage Notifications –remove notification set up</p> <p>Email Templates, Remove Note –Super User Only</p> <p>Call History –Device information -Backend Data</p> <p>Signal Strength, Service Status, System Info –Selected Device communication information –Backend Data</p>
Reports	<p>Device Temperature –Users can choose a device, day and time range –print report or Print to PDF, OneNote (if installed)</p> <p>Twice Daily -This report will give 2 readings of any device–print report or Print to PDF, OneNote (if installed)</p> <p>Faulty Temperatures –This can show all devices in a group or individual devices and show total readings as well as faults</p> <p>Faulty Probe –This will show any device listed total Probe readings for each set output – Air Temp, Simulated Product temp, Ambient, etc</p> <p>Asset History –Used for device diagnostics</p> <p>Device Trip –Will show if the device has moved -Note this is based on the nearest signal tower in the area and will reflect that base location</p> <p>Faulty Device Duration –Will show device probe temperatures outside of the set temperature and duration</p> <p>Compressor Decay –If installed will allow the technician to diagnose Compressor fatigue</p>
How to Run a report on data	<p>Under Report choose - “Device Temperature”</p> <p>Select the Device in the drop-Down Box</p> <p>Choose the “From” date and time</p> <p>Choose the “To” date and time</p> <p>Choose the “Reading every (minutes) –this can be from 1 –99 minutes</p> <p>Once all parameters are set click the “Generate” button and the report will generate in the background</p>
Printing a Report	<p>Once the report has been generated –go to the end of the report and click on the “blue” highlighted link - “Click here to print report”</p> <p>Choose the printer that you want to print to and click print.</p> <p>To save the report to your PC you will need to install the following programs to execute the printing functions.</p> <p>GOOGLE CHROME</p> <p>MICROSOFT ONENOTE</p> <p>Google Chrome –this will enable the extension to allow you to save to a PDF and save it to a desired location on the PC</p> <p>Microsoft OneNote–this will enable the extension to allow you to export to a OneNote.</p>
Warranty	<p>The Medisafe Plus fridges come with 24 months parts and Labour.</p> <p>The AQ Cold Based Monitoring Device is also 24 months parts and labour when delivered and installed by an Avem Quirks technician at the time of delivery</p>