

# POWER BACKUP & PROTECTION

## FOR MEDICAL ENVIRONMENTS



An **Uninterruptible Power Supply Unit (UPS)** will backup critical medical electronic equipment should there be any problem with the power supply. PowerShield have a complete range of solutions to provide smooth power for equipment such as medical fridges, computers, servers and hospital beds, ensuring there are no interruptions.

Power failures can occur for many reasons. How a power failure is managed in your organisation may depend upon the cause of the power outage, whether prior notice was given and the time of day that the outage occurs. Installing an Uninterruptible Power Supply will ensure that equipment continues to run smoothly in the event of a power problem or outage.

There are a range of options available to provide backup power for use in healthcare environments including hospitals, pharmacies, laboratories and other institutions and selecting the most appropriate choice requires a thorough examination of the facility's loads, power supply and energy management capacity.

**Medical Refrigeration** is a one application where backup power is essential. Temperatures are electronically controlled and can detect and report any variances outside of defined ranges depending on the application. In most industries service providers must ensure plans are in place for responses to any breaches and power failures.

Questions to ask when looking at power protection for medical refrigeration include:

### **How long will the refrigerator remain within the recommended temperature range in the event of a power failure?**

In the event of a power failure a medical refrigerator may only remain within the recommended temperature for 20–30 minutes before the internal temperature rises above the maximum allowance for the contents.



AUSTRALIAN DESIGNED  
POWER PROTECTION  
SOLUTIONS

**SWISS+EC**  
MODULAR TECHNOLOGES



### **A UPS Can:**

- Allow providers to continue to store vaccines and other items between the recommended temperatures of in the event of a power outage, thereby minimising loss.
- Allow the fridge to continue to display the current temperature during a power failure. Note: not all purpose-built refrigerators continue to display the current temperature during a power failure and require a separate battery-operated minimum/maximum thermometer to continually monitoring refrigerator temperatures during power outages.
- A PowerShield UPS can be equipped to provide an email or SMS text message alerts for power outages.

### **When power is returned a PowerShield UPS will ensure that there is minimal disruption to your business whilst on UPS power as you will not need to:**

- Record the refrigerator temperature.
- Reset the temperature.
- Ensure the refrigerator temperature has returned to the ideal temperature before returning contents.
- If a breach has occurred, report it to the relevant state or territory health department.
- Monitor the refrigerator closely e.g. hourly, then as recommended twice daily.

Power Shield has been designing power protection solutions to meet Australian conditions since 2000 and has extensive knowledge in providing solutions for all business applications. Our dedicated team can assist with the best UPS selection for your medical applications.

### **To correctly size a UPS to your fridge requirement we simply require a:**

- Fridge make/model, or
- nameplate wattage or power consumption (e.g 3.69kWH/24h) and
- back-up time required.