

# THE ARK

## Voltage Optimisation Unit

## 8-13% Whole Site Energy Savings in Supermarkets

**Grants now available from NT Government Department of Business up to \$20,000**

### What is the Ark?

The Ark is a high performance voltage optimisation unit that saves energy across lighting, general power and motor loads. Typical savings at supermarkets are in the range of 8-13% with a financial payback of 2-3 years. The Ark is well suited for supermarkets due to the high usage of refrigeration equipment and the long operating hours of the building.

### What is Voltage Optimisation?

Approximately 90% of buildings in Australia are supplied with electricity at a higher voltage than they need.

Due to the nature of the electricity grid,

in order to ensure that all buildings receive the minimum voltage level, most buildings receive voltage on the higher end of the allowable range.

Many types of electrical equipment consume more energy at higher voltages. This results in inflated electricity bills and additional greenhouse emissions.

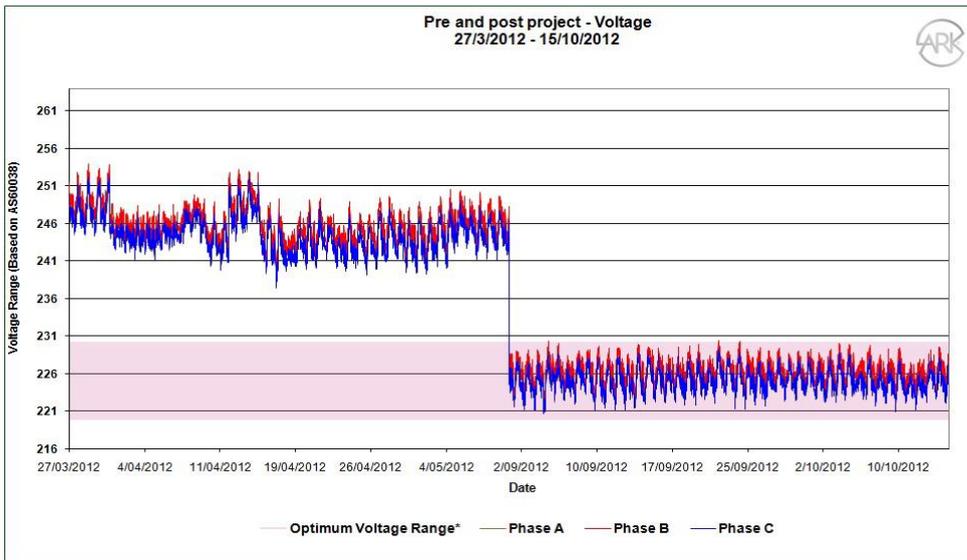
Voltage optimisation reduces the voltage of the electricity supplied to equipment, minimising energy consumption, while remaining within the operating conditions specified by the equipment manufacturers. This is illustrated in the chart below, with the pink band reflecting the optimum voltage range for most equipment.

Intrinsic within the design of the Ark are other power quality benefits, including protection from transients, short term power surges and harmonics, improvements in power factor (unused energy that flows back and forth in the electrical system).

**The Ark's core component has a 10-year warranty period and a projected 50 year lifespan. There are no moving parts and no maintenance required.**

### The Ark will help you:

- Align your electricity supply to the level your equipment is designed to operate most efficiently at
- Reduce electricity expenditure and carbon emissions by 8-13% on average for supermarkets
- Increase business profitability
- Reduce heat within your equipment and extend the lifespan of motors, lighting and appliances
- Reduce the maintenance costs on your equipment
- Typical Return of Investment of 30-50% p.a.
- Hassle free energy savings.



Some of the Supermarket companies benefitting from The Ark:





# THE ARK

## Voltage Optimisation Unit

Proven Reliability  
You're Guaranteed to Save

### How Reliable is The Ark?

The Ark's core component has a 10-year warranty period and a projected 50 year lifespan. There are no moving parts and no maintenance required. It is a set and forget product, manufactured and commissioned to the highest quality standards. The units are assembled and customised in an Australian ISO9001 accredited manufacturing facility, incorporating a Japanese patented core component.

### The Ark is a proven technology

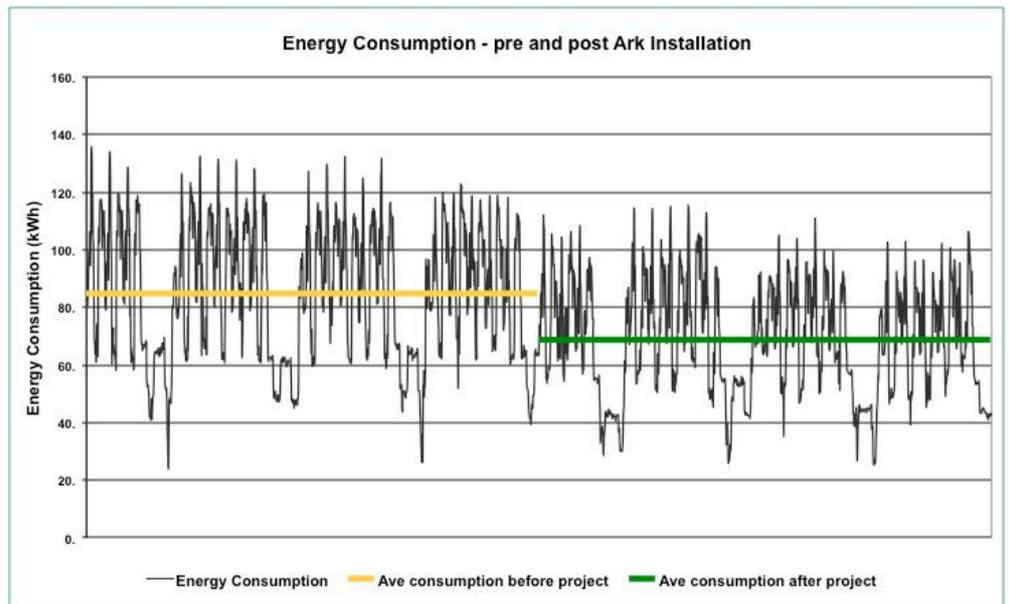
There have been hundreds of Ark units installed in Australian buildings over the past 10 years. Many installations have received state and federal government funding support, with each project delivering on all performance requirements. Many of Australia's largest and most discerning organisations have selected The Ark Voltage Optimisation Unit as a primary way of reducing their energy usage.

### Who is using The Ark?

Supermarkets which have installed The Ark to reduce their energy usage include Outback Stores, ALPA Community Stores, IGA Supermarkets and Foodland Supermarkets. Other organisations include Colonial First State, Toll Group, Westfield, Quest Apartments, Pepsico, AMP Capital, Mirvac Real Estate, RM Williams, Queensland Department of Education, National Parks and Wildlife and dozens of local government organisations.

"We'd been looking for ways to lower our energy use and carbon footprint for years when the ESE team first started working with us. Their voltage optimisation unit ticked all the boxes; simple and robust enough for harsh remote conditions, quick return on investment, and supplementary benefits in surge protection that has already paid for itself. The Ark units have delivered 14% savings year on year, and are on track to pay themselves off quicker than budgeted. ESE bring a range of innovative solutions to our business that will benefit us for years to come."

**Michael Nemarich, General Manager Operations, ALPA**



### HOW DO I FIND OUT MORE?

Everybody Saving Energy is an accredited distributor of The Ark. For a no-cost, obligation free proposal for your site, and to check if you are eligible for grant funding, contact Norm McPherson on 0403 019 358 or [norm@everybodysavingenergy.com.au](mailto:norm@everybodysavingenergy.com.au)