

Guaranteed energy savings through voltage optimisation

What it does

Powerstar's unique, patented voltage optimization (VO) system reduces overall power consumption of electrical loads by dynamically reducing the voltage.

Energy savings

Energy savings are typically in the range of 15% or more. Around 75% of the achieved savings derive from reduced voltage, and a further 25% of savings are due to increased efficiency of the load equipment.

Financial case

Customers often buy Powerstar solutions outright, in order to capture all financial benefits. Expected financial returns are in the range of 30-40% pa.

Cash flow positive

Powerstar solutions may be rented. During the term of the rental, the energy savings would exceed the rental costs, delivering a cash flow positive solution for the customer.

Guarantees

Powerstar provides a financial guarantee on performance, for 100% of the proposed energy savings (kWh). Powerstar underwrites the business case.

Warranty

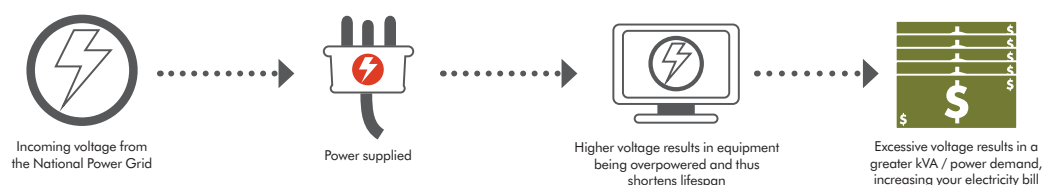
Powerstar provides a 10-year factory warranty across the Asia Pacific region.

CO2 reductions

By reducing the energy consumption at the site, the customer's CO2 footprint is reduced. The reduction is measured and verified, and may be used as a basis for CO2 abatement payments that are available in some jurisdictions.

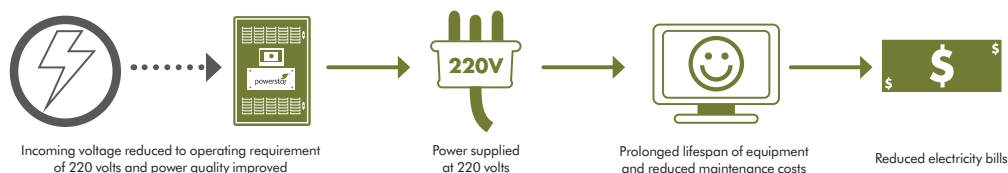
Without Powerstar

NORMAL ELECTRICITY CONSUMPTION



With Powerstar

powerstar CONTROLLED ELECTRICITY CONSUMPTION



EMSc Asia Pacific is the Master Distributor for all Powerstar products and operates across the ASIA PACIFIC region

EMSc Asia Pacific Pty Limited
Suite 205
17-33 Milton Parade
Malvern VIC 3144
Australia

Tel: +65 6491 5046
Tel: 1300 659 463
Eml: sales@emscap.com.au
Web: www.emscap.com.au
Web: www.powerstar.com



How it works

For most loads, the load power varies as the square of voltage. So by reducing the voltage, energy bills will be reduced significantly. Because of the patented design, regardless of the type of load that is connected, savings will be achieved.

Local grid

Local grid voltages are on average high, and variable. Powerstar reduces and stabilizes the voltage in real time, to nameplate levels.

Verification

Powerstar uses the IMVMP methods for verification of savings, and users can use the local or networked display to monitor savings in real time.

Type of load

Powerstar will deliver savings on HVAC, refrigeration, lighting, LED lighting, motors, VSD's, industrial plant, computer systems, battery chargers, and most loads.

Typical applications

Office buildings, hotels, resorts, airports, university campuses, cold stores, distribution centres, data centres, manufacturing plant, hospitals, schools, factories, defence sites, telecommunication centres. In fact, most facilities will derive significant benefits from Powerstar.

Other benefits

Powerstar reduces heating losses in equipment resulting in lower operating temperatures and extended equipment lifetimes. Powerstar also protects sensitive electronic equipment from overvoltage and transients.

Wide solutions

Powerstar is available in LV and HV solutions (up to 56kV, 4 MVA) to meet all installation requirements.

Other solutions

Powerstar also provide its Virtue integrated VO and battery storage solutions (up to 10MWh) to meet industrial customer requirements for non-stop power. Virtue is designed to integrate in solar PV installations for renewable, and off-grid energy solutions.

Global clients



EMSc Asia Pacific is the Master Distributor for all Powerstar products and operates across the ASIA PACIFIC region

EMSc Asia Pacific Pty Limited
Suite 205
17-33 Milton Parade
Malvern VIC 3144
Australia

Tel: +65 6491 5046
Tel: 1300 659 463 (AUS)
Eml: sales@emscap.com.au
Web: www.emscap.com.au
Web: www.powerstar.com



ABN: 71 604 663 907
Powerstar is a trademark of EMSc (UK) Ltd