



FEATURE STORY

VOLTAGE OPTIMISATION COMPLEMENTS SOLAR PV

**Better voltage. Better performance.
More energy. Greater value.**

Voltage Optimisation (VO) works hand in hand with Solar PV systems to boost efficiency, protect equipment, stabilise the grid and maximise the return on your solar investment.

By **JAMES MORGAN**
Energy Correspondent

By regulating and optimising the voltage supplied to electrical equipment, Voltage Optimisation ensures Solar PV systems operate in their ideal voltage range — delivering more energy, extending component life and reducing costs.

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**MAXIMISE
YOUR SOLAR
INVESTMENT**
WITH VOLTAGE
OPTIMISATION



INCREASED ENERGY PRODUCTION

Optimised voltage helps PV systems operate at peak efficiency.



PROTECT & EXTEND EQUIPMENT LIFE

Stable voltage reduces stress and wear on inverters, panels and batteries.



ENHANCED GRID STABILITY

Better voltage balance supports smooth integration of solar power.



GREATER FINANCIAL BENEFITS

Higher yields, lower costs and stronger returns on your investment.

VO + SOLAR PV: THE PERFECT PARTNERSHIP

Voltage Optimisation complements Solar PV by creating the ideal electrical environment for your system to perform at its best — today and for the long term.



SOLAR PV

Generates clean renewable energy



VOLTAGE OPTIMISATION

Delivers the right voltage for peak performance



**MORE ENERGY
MORE SAVINGS
LESS EMISSIONS**

AT A GLANCE

- ✓ Improved efficiency and energy yields
- ✓ Reduced electrical losses
- ✓ Longer equipment life and reliability
- ✓ Enhanced grid integration
- ✓ Lower operating and maintenance costs
- ✓ Stronger sustainability outcomes

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EMSC ASIA PACIFIC

Energy Efficiency Systems

1300 659 463

sales@emscap.com.au

www.emscap.com.au





FEATURE STORY CONTINUED

VOLTAGE OPTIMISATION COMPLEMENTS SOLAR PV

A closer look at the benefits

Voltage Optimisation (VO) is an energy-saving solution for regulating and optimising the voltage supplied to electrical equipment to the optimal level for efficient operation. The purpose of VO is to reduce energy consumption, lower electricity bills, and decrease carbon emissions by ensuring that electrical devices operate at their most efficient voltage level.

HOW VOLTAGE OPTIMISATION ENHANCES SOLAR PV PERFORMANCE

BENEFIT	EFFECT	DETAILS
 <p>1. VOLTAGE REGULATION AND EFFICIENCY</p>	VO systems regulate supply voltage to a consistent level, close to the optimal voltage for electrical appliances, including Solar PV systems.	<ul style="list-style-type: none"> Increased Efficiency: Helps maintain voltage within the optimal range for solar inverters. When voltage is too high or too low, inverter efficiency drops, reducing overall PV performance. Reduced Losses: Proper voltage regulation minimises electrical losses, maximising the energy generated and reducing system losses.
 <p>2. LONGEVITY OF SOLAR PV COMPONENTS</p>	Consistent voltage levels extend the lifespan of solar panels and associated electronic components such as inverters and batteries.	<ul style="list-style-type: none"> Extended Lifespan: Reduces voltage fluctuations, maintaining a stable operating environment that lowers maintenance and component failure. Reduced Wear and Tear: Stabilised voltage levels minimise the risk of over-voltage conditions that can damage sensitive electronic components.
 <p>3. GRID INTEGRATION AND STABILITY</p>	VO systems enhance grid stability, providing a more stable voltage environment for the effective integration of distributed energy resources like PV systems.	<ul style="list-style-type: none"> Improved Grid Stability: Helps balance voltage levels across the grid, reducing the impact of fluctuations caused by the variable nature of solar power generation. Enhanced Integration: Stable grid conditions facilitate smoother integration of solar PV systems, improving overall system performance.
 <p>4. ECONOMIC AND FINANCIAL BENEFITS</p>	Optimising voltage increases energy production and reduces operational costs, enhancing the financial return on solar investments.	<ul style="list-style-type: none"> Increased Energy Production: Optimised voltage enables PV systems to operate more efficiently, leading to higher energy yields. Reduced Operating Costs: Better performance and longer equipment life reduce maintenance costs and improve the financial viability of solar projects.



THE VO ADVANTAGE

-  Optimises voltage for peak solar PV performance
-  Improves energy yields and system efficiency
-  Protects equipment and extends asset life
-  Supports a stronger, more reliable grid
-  Delivers greater savings and sustainability



By delivering the right voltage to your Solar PV system, Voltage Optimisation unlocks more energy, lower costs and a cleaner, more sustainable future.



Voltage Optimisation and Solar PV are better together.

Optimise your voltage. Maximise your solar. Power a sustainable future.



Voltage Optimisation can provide a very useful contribution to a company's plans to meet its carbon emission targets, as well as reporting requirements. It provides the right voltage to electrical equipment, ensuring efficiency, cost savings, environmental benefits and performance reporting while maintaining equipment performance and longevity.

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-  www.emscap.com.au