

Innovative energy storage solution launched by leading green tech brand

The world's market leading voltage optimisation brand Powerstar, is pleased to announce the launch of a revolutionary new solution, Powerstar Virtue.

A UK manufactured solution from EMSc (UK) Ltd, Powerstar Virtue is a pioneering energy storage system and a result of the company's cutting-edge research and development programme. It is the latest addition in the award-winning Powerstar range of solutions.

Powerstar Virtue uses the unique, patented Powerstar voltage optimisation technology and harnesses the induced negative power feedback to the supply, to charge a storage medium. The energy savings made from the voltage optimisation system are diverted into the Powerstar Virtue energy storage system, which can be used at the most beneficial time to the electricity user.

The solution can be integrated with on-site renewable energy generation to combine the energy saved from the voltage optimisation system with that generated from the renewable energy source. As a result, users can save by switching to the stored supply at any time they wish, as well as ensuring a constant and reliable energy supply.

There is a growing requirement globally for energy storage solutions as energy grids around are struggling to cope with the surge in demand for electricity, which causes increased supply instability. This ever increase in demand requires more cabling and pylons to support usage, a cost that is ultimately passed onto electricity users.

Speaking about the new Powerstar Virtue system, creator Dr Alex Mardapittas said: "Energy storage is recognised in many studies as an important solution to address the growing energy problems, as it allows energy generated during periods of low demand to be stored locally and used at peak times."

Dr Mardapittas added, "Powerstar Virtue takes this one step further, by allowing energy saved from voltage optimisation technology to be diverted into storage, along with combining

T: +44 (0)114 257 6200
E: info@ems-uk.org
F: +44 (0)114 257 2699
www.powerstar.com
www.ems-uk.org

EMSc (UK) Limited
EMS House, Unit 2
4 Cowley Way
Ecclesfield
Sheffield S35 1QP



energy generated from onsite renewables, when available, the solution gives the user greater reliability, unprecedented control over their own supply and makes renewable energy reliable.”

Additional benefits of Powerstar Virtue include eliminating the use of inverters on renewable installations, this can help to reduce costs of renewable installations and improve return on investment. Sites will also benefit from reduced harmonics, voltage phase balancing and improved power factor along with reduced maintenance costs of electrical equipment and a 100% savings guarantee, as offered with all Powerstar voltage optimisation solutions.

The breakthrough solution is expected to attract huge interest from the commercial sector attracted by the significant savings, flexibility and reliability provided by the new Powerstar Virtue. Grid operators and utility companies will also benefit from being able to provide a more efficient and effective electrical network with increased stability and no interruptions.

For more information about Powerstar Virtue visit www.powerstar.com or call 0114 2576 200.

Ends

About Powerstar:

Powerstar is a true voltage optimisation system that is designed and manufactured by EMSc (UK) Ltd. Powerstar is an engineered electrical energy saving solution for commercial buildings that works to reduce energy consumption, lower electricity bills and reduce a company's impact on the environment. Powerstar:

- Has been manufactured in the UK by EMSc (UK) Ltd for over 13 years
- Is the only voltage optimisation system in the world to be granted a patent on its design
- Range includes Powerstar HV MAX (HV side optimisation) and Powerstar (LV side fixed optimisation) as well as Powerstar MAX (LV side electronic-dynamic optimisation)

T: +44 (0)114 257 6200
E: info@ems-uk.org
F: +44 (0)114 257 2699
www.powerstar.com
www.ems-uk.org

EMSc (UK) Limited
EMS House, Unit 2
4 Cowley Way
Ecclesfield
Sheffield S35 1QP



- Has been installed successfully worldwide - Landmark installations include: Palace of Westminster, London City Hall, House of Keys and Western Parliament Australia
- Clients include: ASDA, NHS, Cineworld, Co-Operative Group, Hilton Hotels, Sheffield Hallam University, Transport for London, Premier Inn, Cabinet Office, AESSEAL, Merseyside Police, Sandvik, Punch Taverns, Beefeater Grill, Holiday Inn, Mothercare, University of Surrey, London Fire Brigade and Sheffield City Council
- Range is fully designed and manufactured in the UK, by Sheffield based EMSc (UK) Ltd
- Systems reduce electricity consumption, delivering savings on electricity bills through the reduction and cleaning of the incoming power supply, at the same time also reducing CO₂ emissions
- Has recorded savings of up to 26.1% on electricity consumption (Guoman Thistle Hotel – London), average expected savings from installation of a Powerstar system are 12%-15%
- Comes with guaranteed savings, 15 years warranty (10 outside the UK) and an expected 50 year lifespan

About EMSc (UK) Ltd:

EMSc (UK) Ltd, based in Sheffield, UK, is an energy solutions manufacturer renowned for the design and manufacture of the Star® range of energy saving technologies, including flagship solution – Powerstar voltage optimisation systems.

Along with a UK head office, EMSc (UK) Ltd has offices in Australia and Cyprus. Together they serve regional business operations and work alongside a network of local distribution partners, who in turn work globally to bring the company's award winning technologies to market. The company has been honoured with many prestigious awards and accolades:

- Quality Assurance ISO9001 and Environmental ISO4001 accredited
- Awarded with the Made In Sheffield mark of manufacturing excellence
- NICEIC approved contractor
- Safecontractor approved
- 2014 - Winner Energy Environment Award, Sheffield Business Awards
- 2013 - Winner of the UKT&I Exporter of the Year Award
- 2012 - Winner of the PWC Private Business Award for Yorkshire
- 2011 - Winner of the Yorkshire Post Business in Excellence Innovation Award
- 2010 - Winner of the Yorkshire Forward Innovator/10: Innovation in Action Award
- 2006 - Winner of the CARE4AIR AWARD
- 2006 & 2004 SMART Award for Innovation

T: +44 (0)114 257 6200
E: info@ems-uk.org
F: +44 (0)114 257 2699
www.powerstar.com
www.ems-uk.org

EMSc (UK) Limited
 EMS House, Unit 2
 4 Cowley Way
 Ecclesfield
 Sheffield S35 1QP



Exclusively distributed in UAE by MHM Green Systems DMCC

MHM Green Systems DMCC, Unit No. 10-00-B3, Ground Floor, Bldg No. 1 Plot No. 550
554, Jewellery & Gemplex, DMCC, P.O. Box 340096, Dubai, United Arab Emirates

www.mhmgreensystems.com



MHM GREEN SYSTEMS DMCC
'Energy is Money, let us save it'

T: +44 (0)114 257 6200
E: info@ems-uk.org
F: +44 (0)114 257 2699
www.powerstar.com
www.ems-uk.org

EMSc (UK) Limited
EMS House, Unit 2
4 Cowley Way
Ecclesfield
Sheffield S35 1QP



Company Reg No. 4209907
Registered in England and Wales

