Building More Flexible & Efficient Interiors

A New Standard for Commercial Buildings

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at LIGHTFAIR May 2009





The Alliance is an open, not-for-profit, industry consortium.

What Is The EMerge Alliance?

An open industry association...

- Formed by leaders in architecture, engineering, construction, energy, technology and building products
- Promoting the rapid adoption of safe, low voltage DC power distribution and use in commercial interiors
- Professionally managed and based in California
- Accepting new members





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What is EMerge about?

A DC-powered platform for commercial interiors.

- Safe, low voltage DC power distributed within a building
- Enabling plug-and-play device flexibility and increased energy savings
- Optional direct DC-power integration with alternative energy sources
- A new open standard for a wide variety of commercial buildings



Focused on creating a hybrid power topology that meets the needs of buildings today and tomorrow.

Where Is EMerge Focused?

A hybrid power application for commercial interiors.

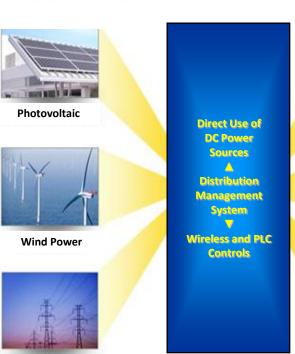
ELECTRICAL ENERGY SOURCES



Site Generation



Campus Fuel Cells



ELECTRO-ACTIVE INTERIOR LOADS





Data Centers

Sensor & Controls

OPTIMUM POWER SOURCING, USE & MANAGEMENT



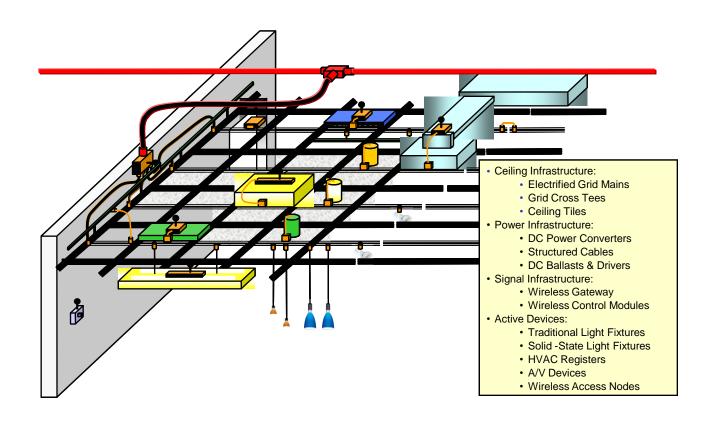
AC Line Power



Standardizing a low voltage DC layer that is code-compliant and versatile for plug and play functionality with a wide range of DC-based devices.

Safe, Efficient, Plug & Play

Put it all together in a simple, organized way.







Do more with unimaginable ease

Flexibility

Unprecedented design and space flexibility.

- Allow direct access to safe power wherever it's needed
- Make it easier to install light fixtures, sensors, actuators and other devices
- Plug and play mobility and simplicity
- Enable easy repurposing or reconfigurations <u>without</u> rewiring
- Help future-proof a space for new technologies like LEDs





Promote green construction and facility management

Sustainability

Meet needs for today and tomorrow.

- Simpler devices with less materials (no AC-DC conversions)
- Enable re-use of system devices
- Reduce energy consumption through advanced controls and solid-state lighting
- Facilitate the direct connection to alternative energy sources like wind, solar and fuel cells
- Improve energy efficiency through integrated load and source management





Flexibility +
Sustainability =
Savings

Savings

Reap rewards for decades to come.

- Lower reconfiguration costs with plug and play devices to get back in operation sooner
- Allow facility teams to quickly and safely move or reinstall devices
- Reduce technology upgrade costs with this futureready DC platform
- Optimize various types of electrical energy use for better control, metering and demand reduction





Governing Members

Current Members

Leaders in power, lighting, sensors, controls, and interior infrastructure.















Founding,
Participating,
General &
Supporting
Members

Current Members

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Current EMerge Activities

A DC-powered platform for commercial interiors.

- EMerge Standard released for comment
- Advisory Council formed
- Member recruitment
- Demonstration sites
- Conference presentations
- Launching word of mouth campaign





OSRAM
SYLVANIA is a founding member of the EMerge Alliance

See For Yourself....

An EMerge demonstration in our LIGHTFAIR booth



- A dimmable LED downlight fixture using a SYLVANIA DLM 1100 module
- A recessed downlight with SYLVANIA DULUX® T/E compact fluorescent lamp and QUICKTRONIC® 24Vdc input electronic ballast
- A dimmable LED based cove light fixture using SYLVANIA HF²Narrow Stick modules
- Dimmable LED based track mounted fixtures with SYLVANIA HF²Flood modules
- All fixtures controlled by SYLVANIA elogic® wireless dimmers, control switches and wireless, batteryless wallbox controls