



## Ceiling Grid Power

### Low Voltage DC Interconnects

Innovative grid system interconnects distribute safe, low-voltage direct current (DC) power from power server modules to lighting fixtures, sensors, and other devices in the ceiling. Configuration flexibility meets the changing needs of spaces - enabling fast and easy reconfigurations without rewiring. The plug-and-play modularity allows for endless design options that can enhance and change with the functionality of your interiors.





## BENEFITS

- Safe, low-voltage DC power distribution system
- Plug and play standard for integrated management and control of energy efficient devices
- Eliminates device level AC to DC electrical power conversion
- Easier integration of on-site alternative energy sources such as solar, wind, fuel cell and batteries
- Re-purpose and reconfigure your application without rewiring

## APPLICATIONS

- Office
- Higher Education
- Government
- Military
- Data Centers

## ELECTRICAL

- **Operating current:** up to 4.1 Amps
- **Operating voltage:** 24 Volts DC (nominal)

## MECHANICAL

- **Environmental operating temperature:** -55° to 85° C
- **Internal Bus Bar (fixture or device) connector:** 50 cycles min.
- **External Bus Bar (fixture or device) connector:** 50 cycles min.
- **Device Cable Assembly:** 50 cycles min.
- **Power Feed Cable Assembly:** 10 cycles min.
- **Main Beam to Main Beam Cable Assembly:** 10 cycles min.

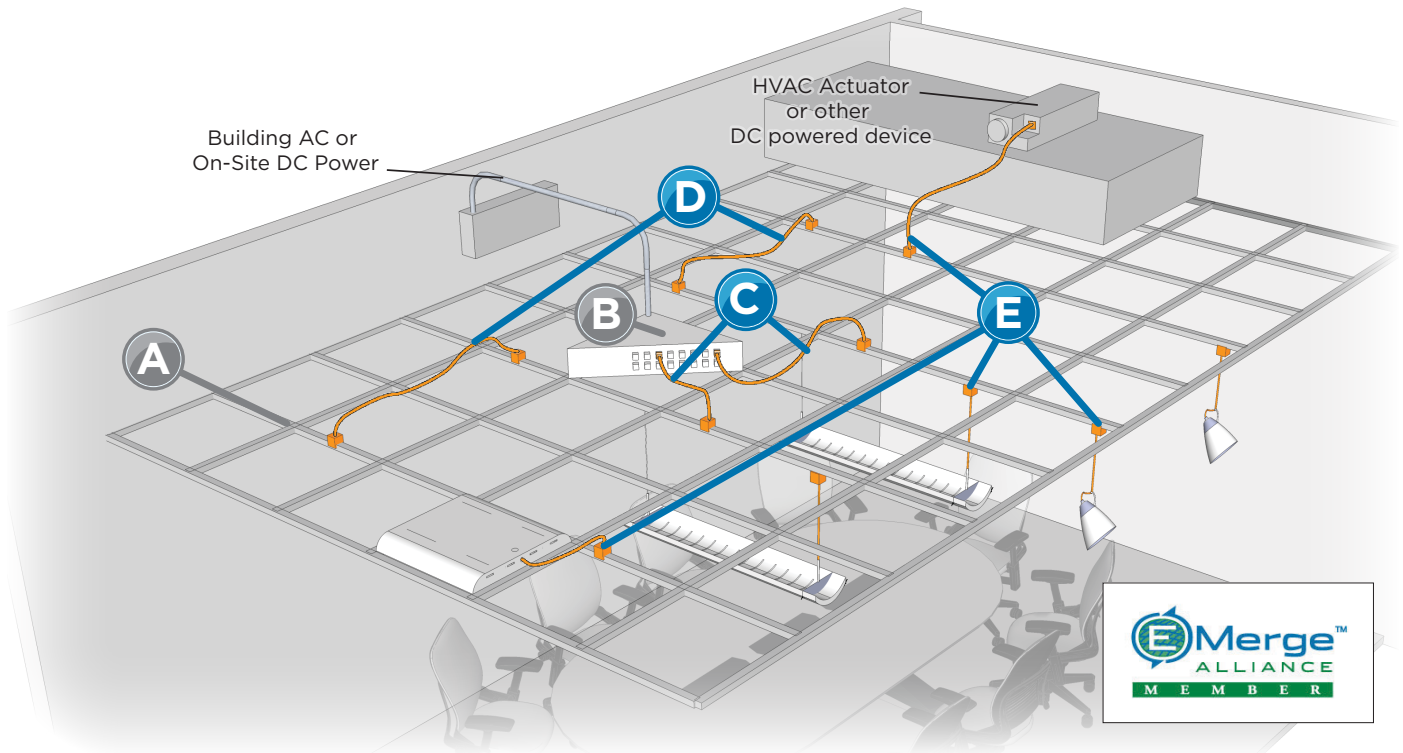
## STANDARDS AND SPECIFICATIONS

- EMerge Alliance® Registered
- UL2577
- ANSI/NFPA 70



Photo courtesy of Armstrong Worldwide Industries

## Design Your Ceiling Grid Power System



### Step 1: Select your ceiling system

- A** DC Flexzone Grid by Armstrong Worldwide Industries, Inc.

### Step 2: Power your DC ceiling system

- B** Power Server Module by Nextek Power Systems

- C** TE Power Feed Cable Assembly

*Connects a power server module to the low voltage bus bar on a DC ceiling grid main beam (up to 16 cable assemblies per power server)*

- D** TE Main Beam to Main Beam Cable Assembly

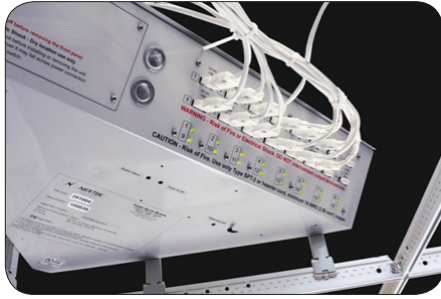
*Connects power from a low voltage bus bar in a main beam to another low voltage bus bar*

### Step 3: Power and Connect your Lighting Fixtures & Devices

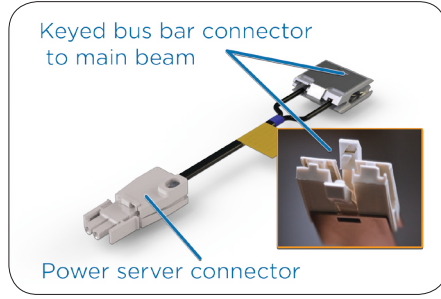
- E** TE Device Connectors and Cable Assemblies

*Connects lighting fixtures & other electrical devices to low voltage bus bar in a main beam*

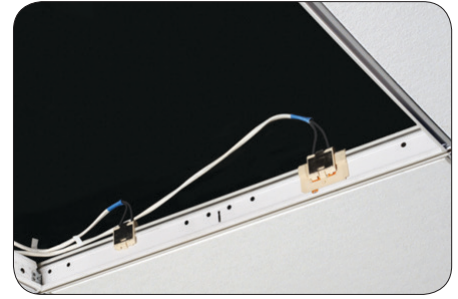
**POWER YOUR DC CEILING SYSTEM**



Power Server Module



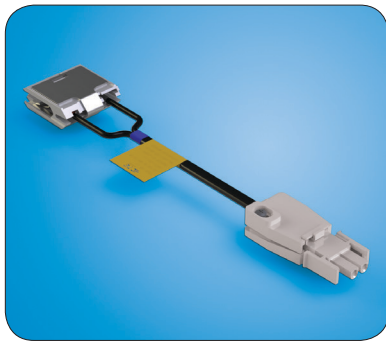
Power feed cable assemblies are keyed for polarization to the main beam



Low voltage bus bar on a DC ceiling grid main beam

**POWER FEED CABLE ASSEMBLIES**

Connects a power server module to the low voltage bus bar on a DC ceiling grid main beam (up to 16 cable assemblies per power server)

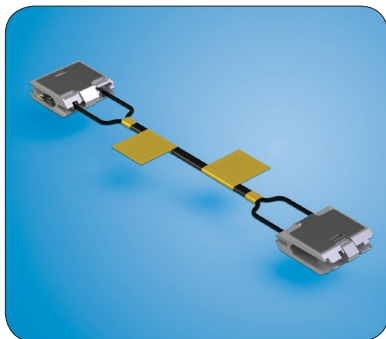


| Part number        | Length ft. |     |
|--------------------|------------|-----|
| 2106725-1 (12 AWG) | 5          |     |
| 2106725-2 (12 AWG) | 10         |     |
| 2106725-3 (12 AWG) | 15         |     |
| 2106725-4 (12 AWG) | 20         |     |
| 2106725-5 (12 AWG) | 25         | NEW |
| 2106725-6 (12 AWG) | 30         | NEW |

Power feed cable assemblies are keyed for connection to power-in key slots on the DC ceiling grid main beam.

**MAIN BEAM TO MAIN BEAM CABLE ASSEMBLIES**

Connects power from a low voltage bus bar in a main beam to another low voltage bus bar



| Part number | Wire gauge | Length ft. |     |
|-------------|------------|------------|-----|
| 2106728-1   | 18 AWG     | 3          |     |
| 2106728-2   | 18 AWG     | 6          |     |
| 2085828-1   | 12 AWG     | 4          | NEW |
| 2085828-2   | 12 AWG     | 8          | NEW |

Main beam cable assemblies are keyed for connection to power-in key slots on the DC ceiling grid main beam.

**POWER AND CONNECT YOUR LIGHTING FIXTURES AND DEVICES**



Connection to bus bar on top of main beam



Connects directly to a fixture and to a main beam



Connection to bus bar on bottom of main beam

**DEVICE CONNECTORS AND CABLE ASSEMBLIES**

Connects lighting fixtures and other electrical devices to the top of a main beam (no keying)



| Part Number        | Length ft. |
|--------------------|------------|
| 2106718-1 (18 AWG) | 5          |
| 2106718-2 (18 AWG) | 10         |

Connects lighting fixtures and other electrical devices to the bottom of a main beam (no keying)



| Part Number | Length ft.     |
|-------------|----------------|
| 2106710-1   | connector only |
| 2085817-1   | 5              |
| 2085817-2   | 10             |

**FIXTURE CONNECTOR**

Connects a light fixture or other device to a top rail attach ceiling system



| Part Number |                |
|-------------|----------------|
| 2106739-1   | connector only |

## FOR MORE INFORMATION

[te.com/lighting](http://te.com/lighting)

### TE Technical Support Center

|                   |  |
|-------------------|--|
| Internet:         | <a href="http://te.com/help">te.com/help</a> |
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| Canada:           | +1 (905) 475-6222                            |
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| Latin/S. America: | +54 (0) 11-4733-2200                         |
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Part numbers in this brochure are RoHS Compliant\*, unless marked otherwise.

\*as defined [www.te.com/leadfree](http://www.te.com/leadfree)

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