



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.

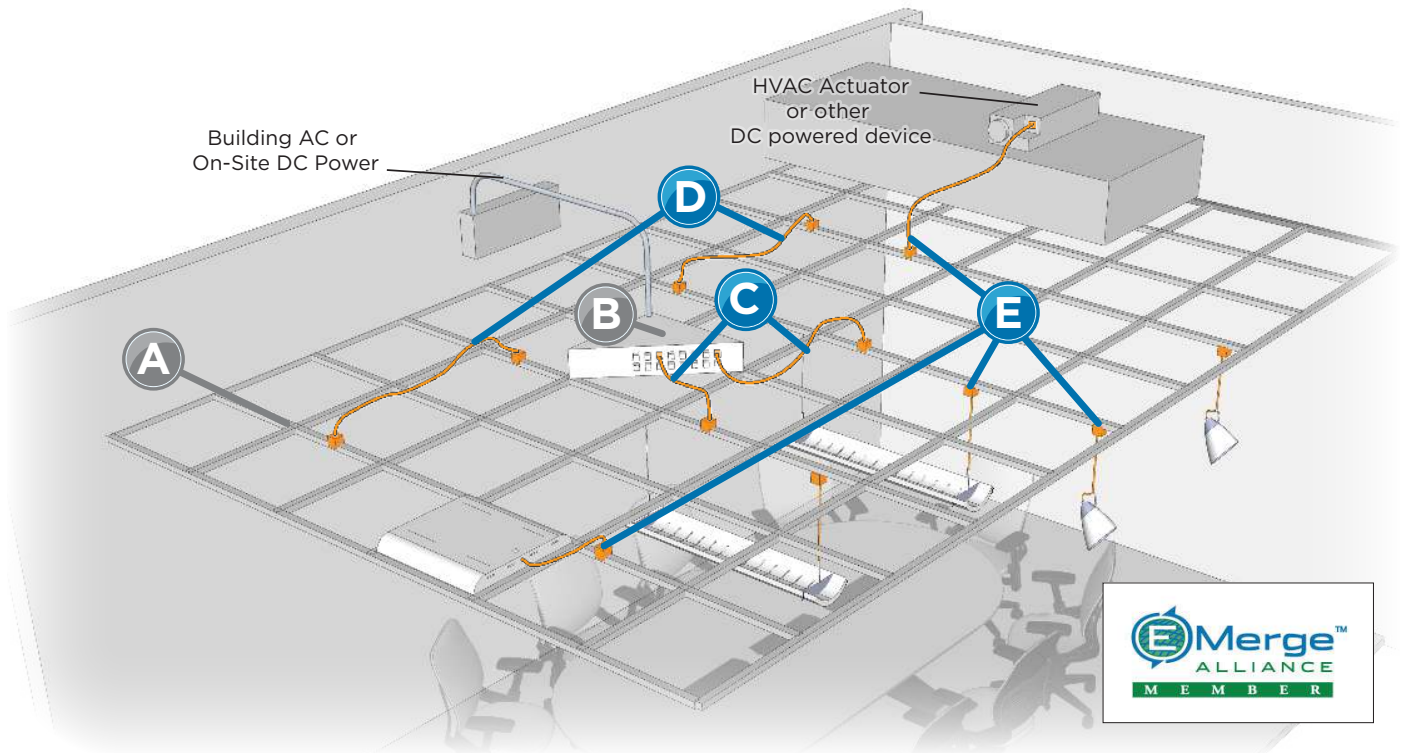
STANDARDS AND SPECIFICATIONS

- 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

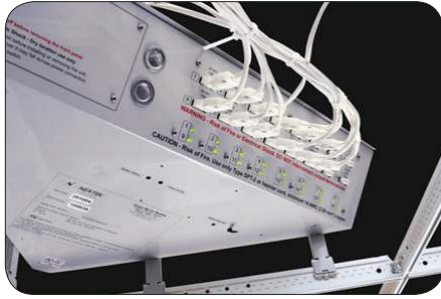
Connects power from a low voltage bus bar in a main beam to another low voltage bus bar

Step 3: Power and Connect your Lighting Fixtures & Devices

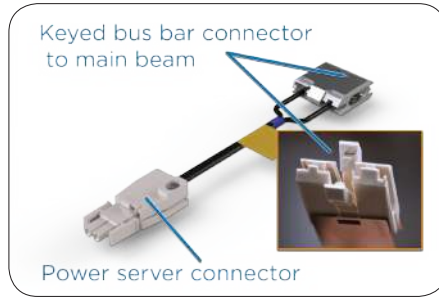
- E** TE Device Connectors and Cable Assemblies

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

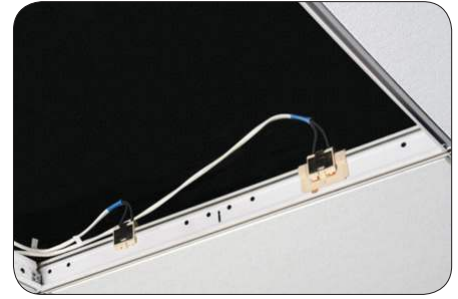
POWER YOUR DC CEILING SYSTEM



Power Server Module



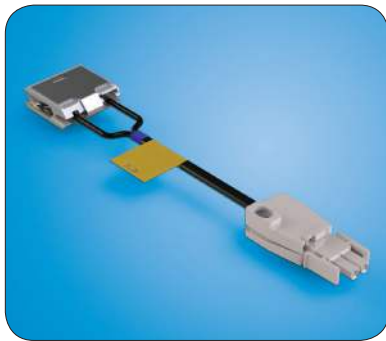
Power feed cable assemblies are keyed for polarization to the main beam



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)

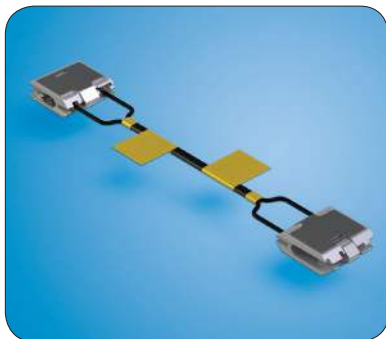


Part number	Length ft.	
2106725-1 (12 AWG)	5	
2106725-2 (12 AWG)	10	
2106725-3 (12 AWG)	15	
2106725-4 (12 AWG)	20	
2106725-5 (12 AWG)	25	NEW
2106725-6 (12 AWG)	30	NEW

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

TE Technical Support Center

Internet:	te.com/help
USA:	+1 (800) 522-6752
Canada:	+1 (905) 475-6222
Mexico:	+52 (0) 55-1106-0800
Latin/S. America:	+54 (0) 11-4733-2200
Germany:	+49 (0) 6251-133-1999
UK:	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015

Part numbers in this brochure are RoHS Compliant*, unless marked otherwise.

*as defined www.te.com/leadfree

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