

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 C Flexzone Grid by Armstrong Worldwide Industries, Inc. Step 2: Power your DC ceiling system Power Server Module by Nextek Power Systems F 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) 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 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

connectivity

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
PN 2201301		
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FOR MORE INFORMATION

te.com/lighting

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Part numbers in this brochure are RoHS Compliant*, unless marked otherwise *as defined www.te.com/leadfree

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