



## 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.

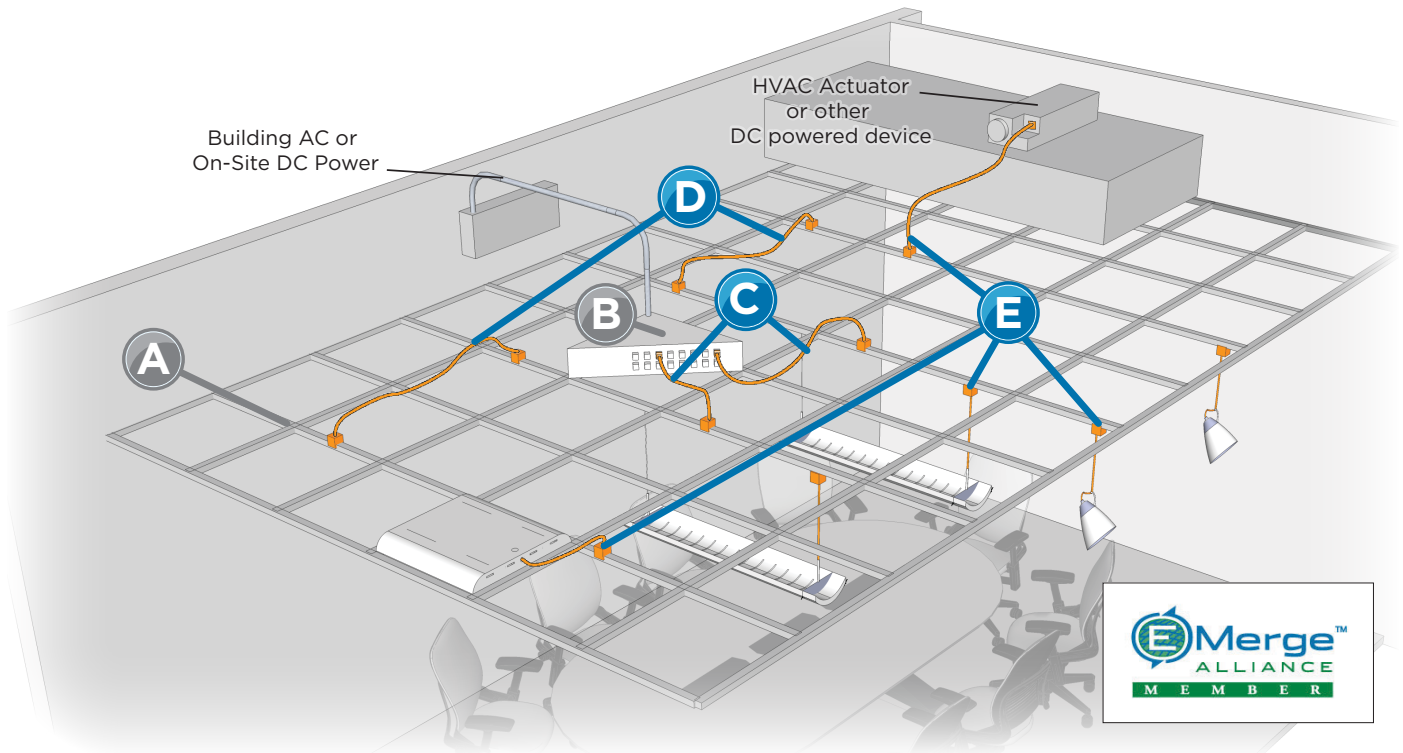
## STANDARDS AND SPECIFICATIONS

- 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

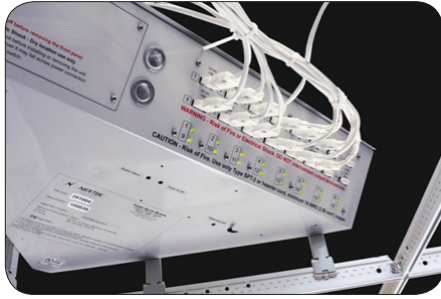
*Connects power from a low voltage bus bar in a main beam to another low voltage bus bar*

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

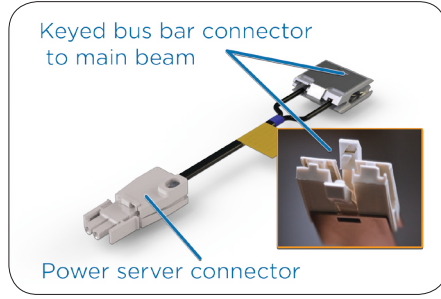
- E** TE Device Connectors and Cable Assemblies

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

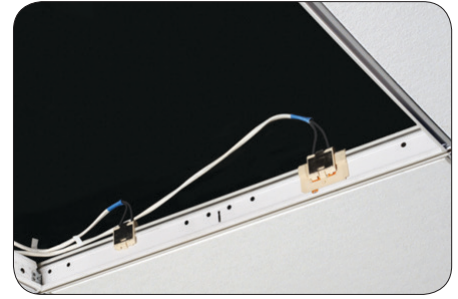
**POWER YOUR DC CEILING SYSTEM**



Power Server Module



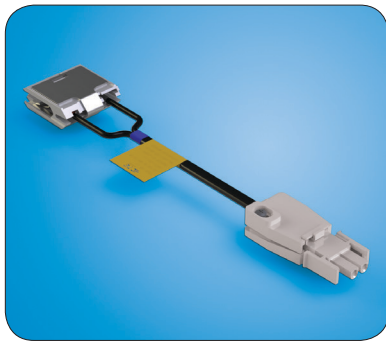
Power feed cable assemblies are keyed for polarization to the main beam



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)

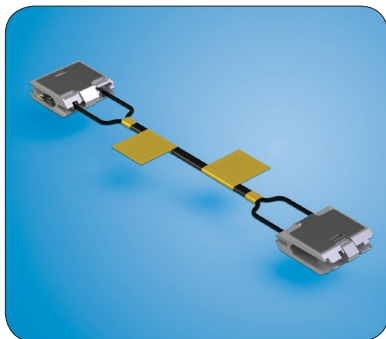


Part number	Length ft.	
2106725-1 (12 AWG)	5	
2106725-2 (12 AWG)	10	
2106725-3 (12 AWG)	15	
2106725-4 (12 AWG)	20	
2106725-5 (12 AWG)	25	NEW
2106725-6 (12 AWG)	30	NEW

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>
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](http://www.te.com/leadfree)

## te.com

© 2012 Tyco Electronics Corporation, a TE Connectivity Ltd. company. All Rights Reserved.

7-1773456-1 CIS JG 06/2012

TE Connectivity and the TE connectivity (logo) are trademarks. Other logos, product and/or company names might be trademarks of their respective owners.

---

While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.