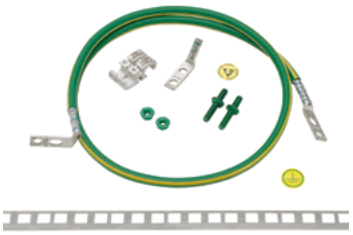
# StructuredGround™ Grounding Kits for Net-Access™ Cabinets and 4 Post Racks

PANDUIT®

SPECIFICATION SHEET

## specifications

Structured grounding kits shall be UL Listed, CSA Certified, and RoHS compliant. Grounding strip and connectors shall be tin-plated. Grounding strip shall comply with EIA universal mounting hole spacing and mount to standard racks and cabinets. All components shall be bonded to the rails with paint piercing hardware. Electrostatic discharge (ESD) ports shall be mounted to both the front and back of the rack or cabinet. Equipment shall be bonded to the grounding strip with a discreet jumper and two-hole long barrel compression lugs. There shall be a #6 AWG copper code discreet jumper that terminates on the mesh common bonding network (MCBN) with a copper compression HTAP and attaches to the grounding strip using a two-hole, long barrel compression lug. The compression lugs shall meet NEBS Level 3 criteria and have inspection windows. All jumpers shall have green-and-yellow VW-1 rated insulation. If the 4 post rack or cabinet is not fully bonded, where rack or cabinet sections bolt together a provision must be made to ensure metal-to-metal contact. An acceptable means of creating this metal-to-metal contact is deploying a tin-plated copper busbar and front to back grounding jumpers to bond to all mounting rails.



## technical information

| | |
|---|---|
| ***Performance level:*** | UL Listed, CSA Certified, RoHS Compliant |
| ***Packaging:*** | Common bonding network (CBN) jumper kit is supplied with one copper compression HTAP, mounting hardware, and antioxidant |
| | Grounding strip kits are supplied with mounting hardware and antioxidant |
| | Equipment jumper kits are supplied with mounting hardware and antioxidant |
| | Surge suppressor jumper kit is supplied with mounting hardware and antioxidant |
| | Grounding busbar kit is supplied with 20 hex head screws pre-installed, mounting hardware, and flat washers for mounting |
| | Front to back rail jumper kits are supplied with mounting hardware, two grounding stickers, and antioxidant |

## key features and benefits

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|---|---|
| ***Visually verifiable ground system*** | Provides a dedicated, low resistance, and visually verifiable ground system to maintain system performance, protect network equipment, and maximize uptime |
| ***Paint piercing components and thread-forming screws*** | Eliminate the need to manually remove paint from the rack or cabinet, saving labor and cost and minimizing metal shavings |
| ***Flexible design*** | Can be installed on readily available, new and existing racks and cabinets that meet EIA-310-D; allows up to 45 units to be grounded |
| ***Complete system of matched components*** | Saves labor and cost by making it easy to select components and kits for the particular rack grounding application |

## applications

Because data center racks and cabinets are typically painted and bolted together, electrical continuity throughout the rack or cabinet is not assured. Panduit® StructuredGround™ Grounding System Kits provide a solution for properly grounding racks, cabinets, and housed equipment. Paint piercing components are available to provide continuity between frame members. Thread-forming screws or bonding studs are supplied with the grounding kits to provide a bond between the grounding strip and the rack or cabinet by removing paint from thread holes and minimizing metal shavings. The grounding strip can be connected to the raised floor or overhead system ground using the common bonding network (CBN) jumper. Network equipment is bonded to the grounding strip using available equipment jumpers and paint piercing hardware.

For the complete StructuredGround™ Grounding System offering, refer to www.panduit.com/dcgrounding

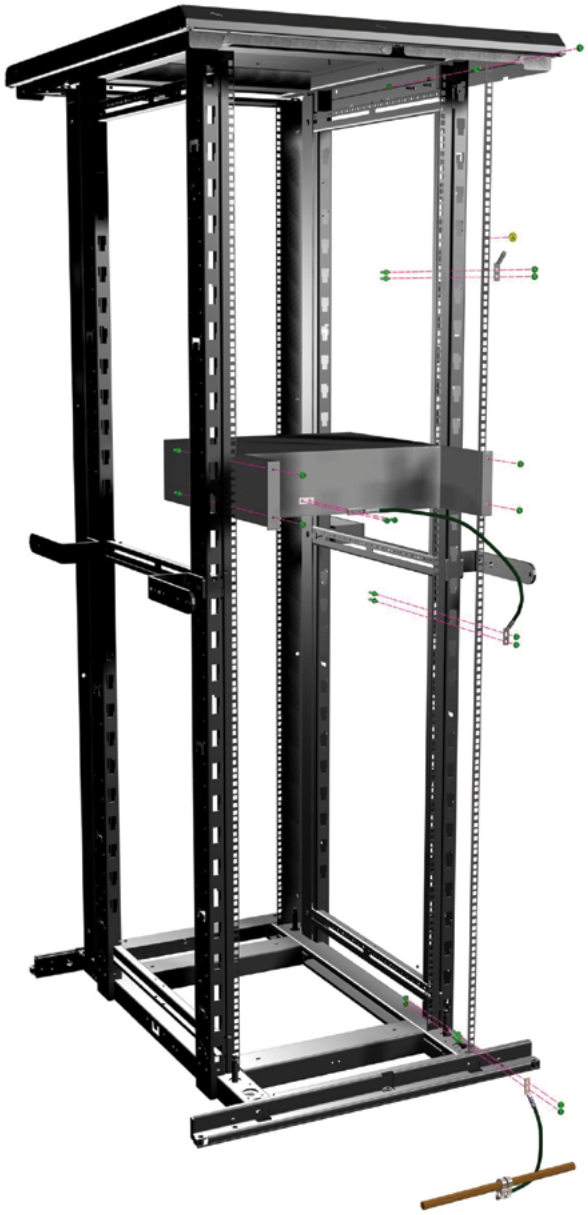
| | |
|---|---|
| ***Common Bonding Network (CBN) Jumper Kit*** | |
| ***#6 – #2 AWG (16 – 35mm2) HTAP, 60"(1.52m) L, #6 AWG (16mm2), factory terminated on one end:*** | RGCBNJ660P22 |
| ***Grounding Strip Kits*** | |
| ***One strip for threaded rail fasteners:*** | RGS134-1Y |
| ***One strip for cage nut rail fasteners:*** | RGS134B-1 |
| ***Equipment Jumper Kits*** | |
| ***#6 AWG (16mm2), factory terminated on one end 57"(1.45m) L, 90° bent:*** | RGEJ657PFY |
| ***Surge Suppressor Jumper Kit*** | |
| ***#10 AWG (16mm2), factory terminated on both ends:*** | SSGK-1 |
| ***Electrostatic Discharge (ESD) Port Kit*** | |
| ***Two-hole for threaded rail fasteners:*** | RGESD2-1 |
| ***Two-hole for cage nut rail fasteners:*** | RGESD2B-1 |
| ***Grounding Busbar Kit*** | |
| ***19"(.48m) L, for threaded:*** | RGRB19U |
| ***19"(.48m) L, for cage nut:*** | RGRB19CN |
| ***Front to Back Rail Jumper Kits*** | |
| ***#6 AWG (16mm2), factory terminated on both ends 30"(.75m) length:*** | CGJ630UB |
| ***Bonding Screws*** | |
| ***#12 – 24 x 1/2":*** | RGTBSG-C |
| ***Bonding Hardware Kit*** | |
| ***Bonding stud kit for cage nut rail fasteners:*** | CGNBSK |
| ***4 Post Racks*** | |
| ***Threaded 84.00"H x 23.25"W x 30.00"D (2.13m x .59m x .76m):*** | CMR4P84 |
| ***Cage nut 84.00"H x 23.25"W x 30.00"D (2.13m x .59m x .76m):*** | CMR4P84CN |

***Net-Access™ Cabinets***

N-Type Network Cabinets are available with threaded rails or cage nut rails - consult factory. S-Type Server Cabinets are available only with cage nut rails.
See www.panduit.com/Cabinets

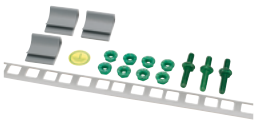
Hardware is also available for mounting to thru-hole, M5, and M6 rails.--
All Panduit® Net-Access™ and 4 Post Racks Cabinets are fully bonded and compatible with StructuredGround™ Grounding System.

# StructuredGround™ Grounding Kits for Net-Access™ Cabinets and 4 Post Racks



Cage nut hardware shown, kits also available for threaded rails.

**Grounding Strip Kit:**
- Provides a bond between the grounding strip and rack or cabinet, eliminating the need to scrape paint



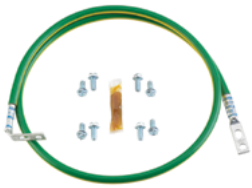
**Bonding Hardware Kit:**
- Patent pending, bonds equipment and patch panels to the front or back of the rack or cabinet



**Electrostatic Discharge (ESD) Port Kit:**
- Bent 45° acts as a hook to hold ESD wrist strap



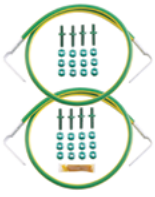
**Equipment Jumper Kit:**
- Bonds network equipment to the grounding strip or grounding busbar



**Common Bonding Network (CBN) Jumper Kit:**
- Connects grounding strip or grounding busbar to MCBN in underfloor and overhead grounding applications



***Front to Back Rail Jumper Kit:**
- Patent pending hardware bonds the front and back cabinet rails to the cabinet grounding busbar



***Grounding Busbar Kit:**
- Provides the common grounding point within the cabinet



*For use with unbonded cabinet; not required for Panduit Net-Access™ Cabinets or 4 Post Racks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6/2016