StructuredGround™ Grounding System Kits for 2 Post Racks

PANDUIT®

SPECIFICATION SHEET

specifications

Structured rack grounding kits shall be TIA-942 compliant, listed for their purpose with a nationally recognized testing laboratory, 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 19 inch and 23 inch racks. All components shall be bonded to the rails with paint piercing hardware. Electrostatic discharge (ESD) ports shall be mounted to the front and back of the rack. Equipment shall be bonded to the grounding strip with a discrete jumper and two-hole long barrel compression lugs. There shall be a #6 AWG copper code discrete jumper that terminates on the mesh common bonding network (MCBN) with a 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. Where rack sections bolt together, paint piercing grounding washers shall be used on both sides, under the head of the bolt and between the nut and the rack.



technical information

Performance level:	TIA-942 Compliant, UL Listed, CSA Certified, RoHS Compliant
Packaging:	Common bonding network (CBN) jumper kit is supplied with one copper compression HTAP, thread-forming screws, and antioxidant
	Grounding strip kits are supplied with thread-forming screws, grounding sticker, and antioxidant
	Equipment jumper kits are supplied with thread-forming screws and antioxidant
	Surge suppressor jumper kit is supplied with thread-forming screws and antioxidant
	ESD port kit is supplied with thread-forming screws, one ESD protection sticker, and antioxidant
	Paint-piercing grounding washer kit is supplied with antioxidant

key features and benefits

Engineered to meet TIA-942	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	Eliminates the need to manually remove paint from the rack, saves labor and cost and minimizes metal shavings
Flexible design	Can be installed on new and existing 19 inch and 23 inch racks that meet EIA-310-D; allows up to 45 rack 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 scenario

applications

Because data center racks are typically painted and bolted together, electrical continuity throughout the rack is not assured. *PANDUIT*® StructuredGround™ Grounding System Kits provide a modular solution for properly grounding racks. Paint-piercing grounding washers are available to provide continuity between frame members. Thread-forming screws are supplied with the rack grounding kits to provide a bond between the grounding strip and the rack 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.

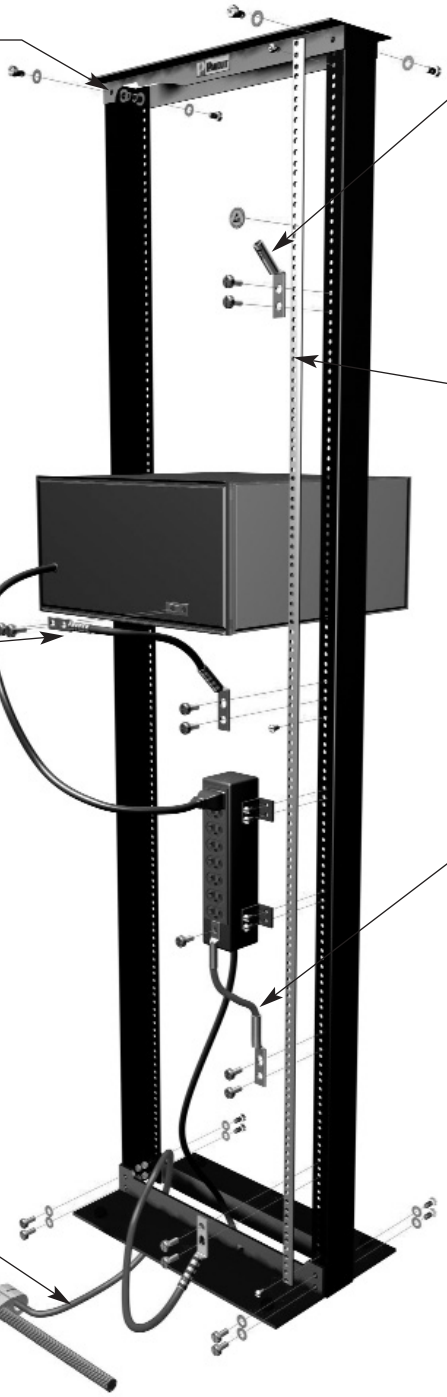
For the complete StructuredGround™ Grounding System offering, refer to www.panduit.com/dcgrounding.

Common Bonding Network (CBN) Jumper Kit	
Factory terminated on one end, 60" (1.52m) L, #6 AWG (16mm²), #6 – #2 AWG (16 – 35mm²) HTAP:	RGCBNJ660P22
Grounding Strip Kits	
1 strip:	RGS134-1Y
10 strips:	RGS134-10-1Y
Equipment Jumper Kits	
#6 AWG (16mm²), factory terminated on both ends 24" (.61m) L, 45° bent:	RGEJ624PHY
24" (.61m) L, 90° bent:	RGEJ624PFY
#6 AWG (16mm²), factory terminated on one end 57" (1.45m) L, 90° bent:	RGEJ657PFY
Surge Suppressor Jumper Kit	
#10 AWG (6mm²), factory terminated on both ends:	SSGK-1
Electrostatic Discharge (ESD) Port Kit	
Two-Hole:	RGESD2-1
Paint-Piercing Grounding Washer Kit (3/8" [M8] stud hole)	
100 washers:	RGW-100-1Y
Bonding Screws	
#12 – 24 x 1/2":	RGTBSG-C
Thread-Forming Screws	
#12 – 24 x 1/2":	RGTS-CY
Slotted Copper Compression Lugs (1/2" – 5/8" [12.7 – 16mm] stud hole spacing)	
#6 AWG (16mm²), straight:	LCC6-14JAW-L
#6 AWG (16mm²), 45° bent:	LCC6-14JAWH-L
#6 AWG (16mm²), 90° bent:	LCC6-14JAWF-L
Related Products	
Standard Racks	
Aluminum 84" (2.13m) H, 19" (.48m) W, 3" (.08m) D:	CMR19X84
47" (1.19m) H, 19" (.48m) W, 3" (.08m) D:	CMR19X47
84" (2.13m) H, 23" (.58m) W, 3" (.08m) D:	CMR23X84
Steel 47" (1.19m) H, 19" (.48m) W, 3" (.08m) D:	CMR19X84S
NetFrame® Rack System	
86" (2.18m) H, 28.4" (.72m) W, 6"(.15m) D:	NFR84

Hardware is also available for mounting to cage nut, thru-hole, M5 and M6 rails.

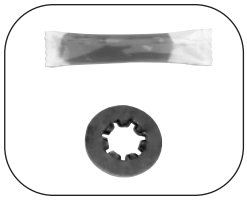
Paint-piercing grounding washers are included with *PANDUIT* Standard and NetFrame® racks.

StructuredGround™ Grounding System Kits for 2 Post Racks



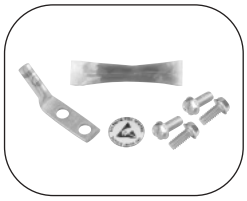
Paint-Piercing Grounding Washer Kit

— Provides a superior bond between frame members; serrations eliminate the need to scrape paint



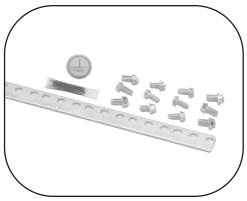
Electrostatic Discharge (ESD) Port Kit

— Bent 45° acts as a hook to hold ESD wrist strap



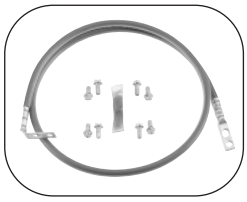
Grounding Strip Kit

— Provides a bond between the grounding strip and rack, eliminating the need to scrape paint



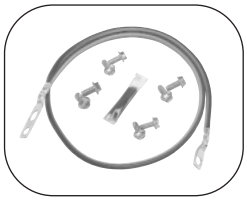
Equipment Jumper Kit

— Bonds network equipment to the grounding strip or grounding busbar



Surge Suppressor Jumper Kit

— Bonds power or data line surge suppressor to 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



Bonding Screw

— Patent pending, bonds equipment and patch panels to the front of the rack



WORLDWIDE SUBSIDIARIES AND SALES OFFICES

PANDUIT CANADA
Markham, Ontario
cs-cdn@panduit.com
Phone: 800.777.3300

PANDUIT EUROPE LTD.
London, UK
cs-emea@panduit.com
Phone: 44.20.8601.7200

PANDUIT SINGAPORE PTE. LTD.
Republic of Singapore
cs-ap@panduit.com
Phone: 65.6379.6700

PANDUIT JAPAN
Tokyo, Japan
cs-japan@panduit.com
Phone: 81.3.3767.7011

PANDUIT LATIN AMERICA
Jalisco, Mexico
cs-la@panduit.com
Phone: 52.333.777.6000

PANDUIT AUSTRALIA PTY. LTD.
Victoria, Australia
cs-aus@panduit.com
Phone: 61.3.9794.9020

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3/2007