PROLINE S1 SERVER PACKAGE

INDUSTRY STANDARDS

UL 2416 Listed File Number E230874
cUL Listed per CSA 22.2 60950-1-07
UL 2416 Bonding and Grounding (with use of PGK grounding Kit)

EIA 310-D (RU – Rack Unit spacing, marking, and positioning)
IEC 60529, IP20

APPLICATION

ProLine S1 Server Packages are data center-ready cabinets for row-based deployment. Pre-configured models are designed to meet your data center needs while reducing lead times. Cabinet features allow for flexible and scalable deployment in multi-tenant, enterprise, and hyperscale data centers.

FEATURES

Doors
- Perforated full door in front and perforated split double doors in rear allow for maximum airflow
- Toolless hinges that allow the doors to easily be removed or reversed in the field
- Doors have ergonomic opening, keylocking handles

Side Panels and Barrier Panels
- Available in both End and Middle side panel configurations:
- End configurations include 2 easy-to-remove, key-locking side covers to cap-off the end of rows.
- Middle configurations include an internal barrier panel to partition between cabinets ganged in a row. Barrier panels include knockout provisions for cable pass-through with brush strips (sold seperately).

Top Cover
- Top cover includes brush sealed cable entry points in each corner. Openings are large enough to accommodate large PDU plugs.
- Overhead cable pathway mounting points on top cover allow for easy ladder rack and basket tray installation. Tested to support NEMA 12C cable tray loading.

Equipment Mounting
- Two sets of L-Shaped, heavy gauge Rack Angles with rack unit markings are furnished for 19" EIA-310 compliant equipment mounting
- Default square holes (.375 in. x .375 in.) on one side and tapped holes (10-32) on the other side
- Mounting fasteners included

Pre-configured Accessories
- Heavy-duty swivel caster and adjustable leveler kit pre-installed
- Internal airflow management provides gasketed seal to prevent mixing of air between hot and cold aisles
- Cable management fingers and troughs on 750mm and 800mm wide cabinets help secure and organize network cables. Include brush strip openings for front-to-rear cable pass-through.
- Toolless under rack blanking panels seal the space between the bottom of the cabinet and the floor.
- Pre-installed joining kits for fast row based deployment
- Includes two sets of PDU mounting brackets (DPDU3) and grounding kit (PGK).

SPECIFICATIONS

- 12 gauge cold rolled multi-formed welded steel frame construction
- Doors made of 16 gauge steel with forms and door stiffener
- Top is made of 16 gauge steel
- Perforated material is made of steel with maximum open space
- Side panels and barrier panels made of 16 gauge steel with formed sides
- Rack angles made of multi-formed 12 gauge steel with tapped (10-32UNF) and square holes per Industry Standards
- Bonding and grounding (earthing) studs on all doors, sides and tops
- Leveler is made of 12mm threaded steel, adjusting nut and composite foot
- Keylocking handle made of composite material – common key on all doors

FINISH

- Pretreated steel coated with RAL 9005 jet black or RAL 9003 signal white low-gloss polyester powder paint.
- Rack angles include printed RU markings on front and rear of rails per industry standards.
- Other finishes available; contact Hoffman Customer Service for details.

LOAD RATING

Static: 3000 lbs per UL 2416

Dynamic: 3000 lbs per UL 2416
Dynamic caster load rating is based on short distances over flat solid surfaces on even floors at walking speeds. Great care must be given when moving any cabinet at any load; contact nVent HOFFMAN for additional guidelines.
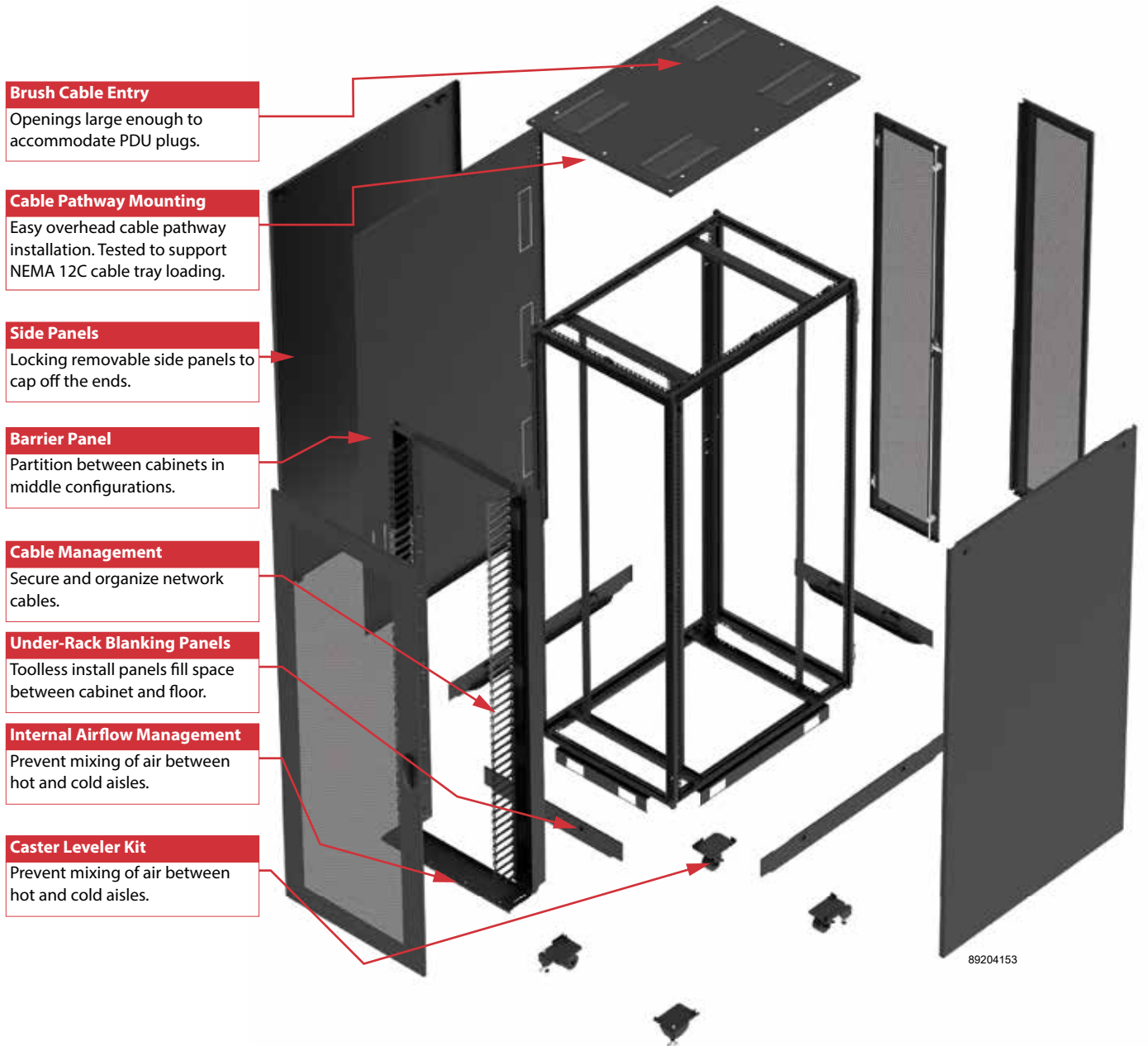
Dynamic Ship Rating: 1000 lbs. per ASTM D4169-14 (Distribution Testing) and ASTM D4728 (Vibration Testing).
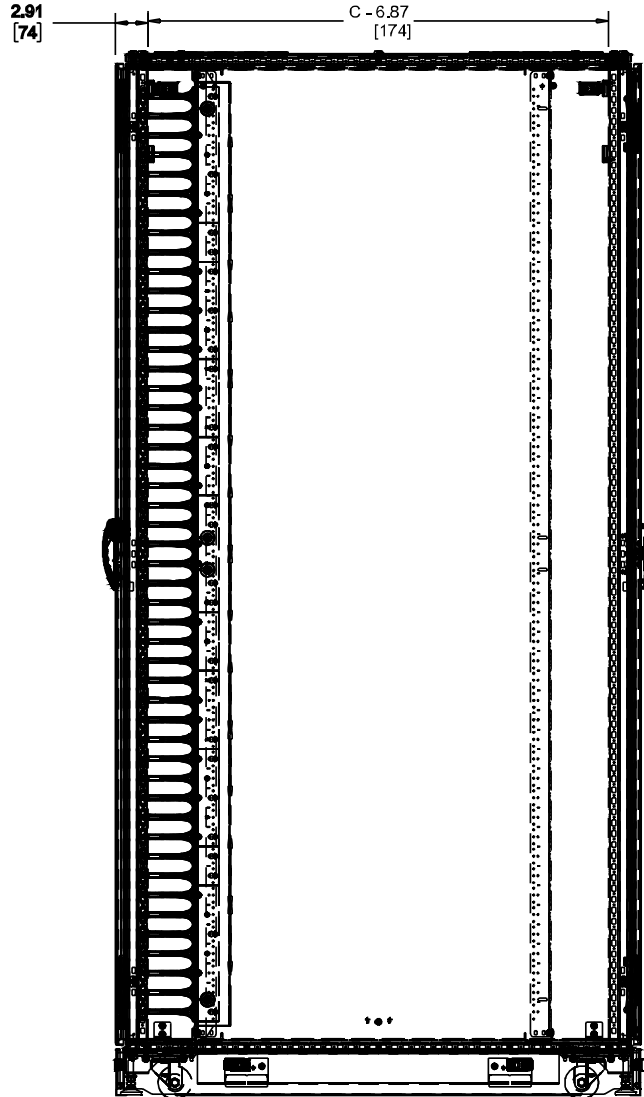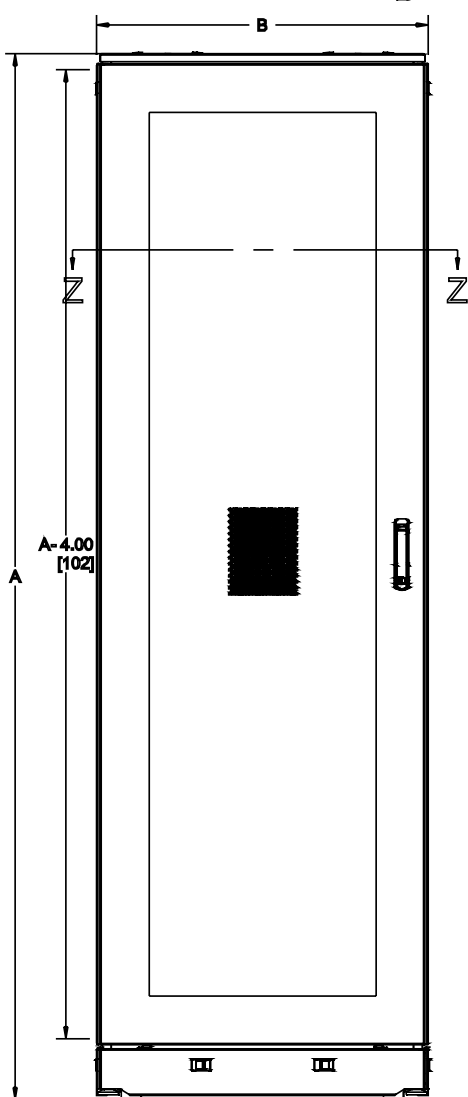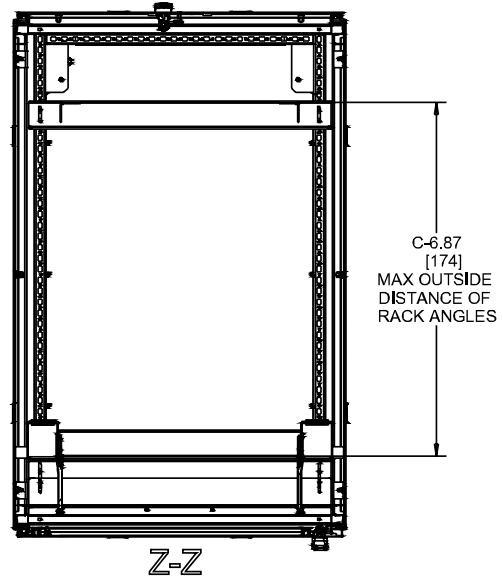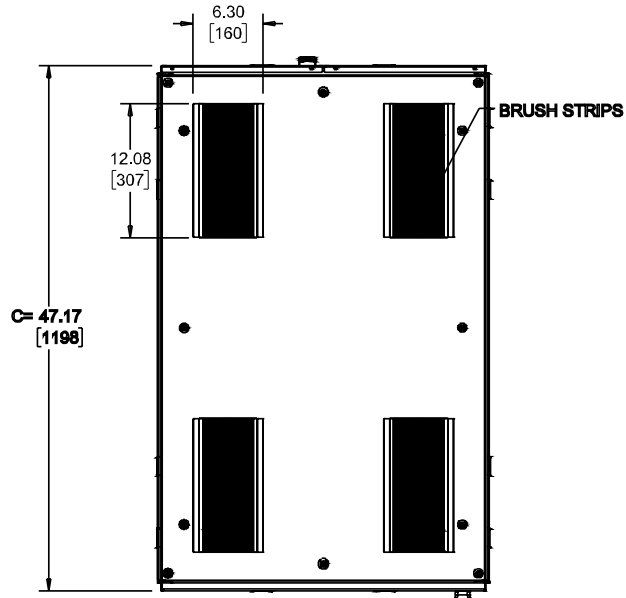
BULLETIN: DPS1

Standard Product **Perforated Door**

Catalog Number	AxBxC in./mm	Configuration	Rack Units	Cable Management	Sides	Color
PS1SPE21612B	88.03 x 23.86 x 47.17 2236 x 606 x 1198	End	45	No	Locking panels	Jet Black
PS1SPM21612B	88.03 x 23.62 x 47.17 2236 x 600 x 1198	Mid	45	No	Internal partition	Jet Black
PS1SPE217512B	88.03 x 29.84 x 47.17 2236 x 758 x 1198	End	45	Yes	Locking panels	Jet Black
PS1SPM217512B	88.03 x 29.53 x 47.17 2236 x 750 x 1198	Mid	45	Yes	Internal partition	Jet Black
PS1SPE21812B	88.03 x 31.81 x 47.17 2236 x 808 x 1198	End	45	Yes	Locking panels	Jet Black
PS1SPM21812B	88.03 x 31.50 x 47.17 2236 x 800 x 1198	Mid	45	Yes	Internal partition	Jet Black
PS1SPE21612W	88.03 x 23.86 x 47.17 2236 x 606 x 1198	End	45	No	Locking panels	Signal White
PS1SPM21612W	88.03 x 23.62 x 47.17 2236 x 600 x 1198	Mid	45	No	Internal partition	Signal White
PS1SPE217512W	88.03 x 29.84 x 47.17 2236 x 758 x 1198	End	45	Yes	Locking panels	Signal White
PS1SPM217512W	88.03 x 29.53 x 47.17 2236 x 750 x 1198	Mid	45	Yes	Internal partition	Signal White
PS1SPE21812W	88.03 x 31.81 x 47.17 2236 x 808 x 1198	End	45	Yes	Locking panels	Signal White
PS1SPM21812W	88.03 x 31.50 x 47.17 2236 x 800 x 1198	Mid	45	Yes	Internal partition	Signal White
PS1SPE23612B	93.94 x 23.86 x 47.17 2386 x 606 x 1198	End	45	No	Locking panels	Jet Black
PS1SPM23612B	93.94 x 23.62 x 47.17 2386 x 600 x 1198	Mid	48	No	Internal partition	Jet Black
PS1SPE237512B	93.94 x 29.84 x 47.17 2386 x 758 x 1198	End	48	Yes	Locking panels	Jet Black
PS1SPM237512B	93.94 x 29.53 x 47.17 2386 x 750 x 1198	Mid	48	Yes	Internal partition	Jet Black
PS1SPE23812B	93.94 x 31.81 x 47.17 2386 x 808 x 1198	End	48	Yes	Locking panels	Jet Black
PS1SPM23812B	93.94 x 31.50 x 47.17 2386 x 800 x 1198	Mid	48	Yes	Internal partition	Jet Black
PS1SPE23612W	93.94 x 23.86 x 47.17 2386 x 606 x 1198	End	48	No	Locking panels	Signal White
PS1SPM23612W	93.94 x 23.62 x 47.17 2386 x 600 x 1198	Mid	48	No	Internal partition	Signal White
PS1SPE237512W	93.94 x 29.84 x 47.17 2386 x 758 x 1198	End	48	Yes	Locking panels	Signal White
PS1SPM237512W	93.94 x 29.53 x 47.17 2386 x 750 x 1198	Mid	48	Yes	Internal partition	Signal White
PS1SPE23812W	93.94 x 31.81 x 47.17 2386 x 808 x 1198	End	48	Yes	Locking panels	Signal White
PS1SPM23812W	93.94 x 31.50 x 47.17 2386 x 800 x 1198	Mid	48	Yes	Internal partition	Signal White

Items with "E" in the catalog numbers are End Packages. Items with "M" in the catalog numbers are Middle Packages.

Brush Cable Entry

Openings large enough to accommodate PDU plugs.

Cable Pathway Mounting

Easy overhead cable pathway installation. Tested to support NEMA 12C cable tray loading.

Side Panels

Locking removable side panels to cap off the ends.

Barrier Panel

Partition between cabinets in middle configurations.

Cable Management

Secure and organize network cables.

Under-Rack Blanking Panels

Toolless install panels fill space between cabinet and floor.

Internal Airflow Management

Prevent mixing of air between hot and cold aisles.

Caster Leveler Kit

Prevent mixing of air between hot and cold aisles.

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[160]

12.08
[307]

BRUSH STRIPS

C= 47.17
[1198]

C-6.87
[174]
MAX OUTSIDE
DISTANCE OF
RACK ANGLES

Z-Z

2.91
[74]

C – 6.87
[174]

B

Z

Z

A- 4.00
[102]

A

89232294

PROLINE S1 CASTER AND LEVELER KITS

Standard Product

Catalog Number	Load Rating	Finish	Fits
PS1CLKLD	900 lbs.	Black with clear zinc plated fasteners	All cabinets
PS1CLKHD	3000 lbs.	Black with clear zinc plated fasteners	All cabinets

Caster/Leveler kits are available in either a light duty (900 lbs.) or heavy duty (3000 lbs.) load rating. The kits are comprised of a set of four caster/levelers and all assembly hardware. Each caster is easily assembled to the cabinet and swivels to allow ease of cabinet movement. The casters are made of black composite material. The levelers are easily adjusted down and secured with furnished locking nuts. These Caster/Leveler kits are designed for moving a cabinet within a facility to its final location.

NOTE: Casters are for moving the cabinet short distances within the building interior space. They are not intended for transportation or shipping. When transporting the cabinet by carrier, the shipping pallet must extend to the frame of the cabinet and at no time should the caster support any load during the shipping process. Casters must have smooth, flat, hard surfaces to move upon. Floors with cracks, seams, debris, inclines, and declines are to be avoided. Great care must always be observed when moving cabinets to avoid tipping. Casters are not designed for exterior surfaces, asphalt, gravel, and other soft surfaces. Contact nVent HOFFMAN for additional details.
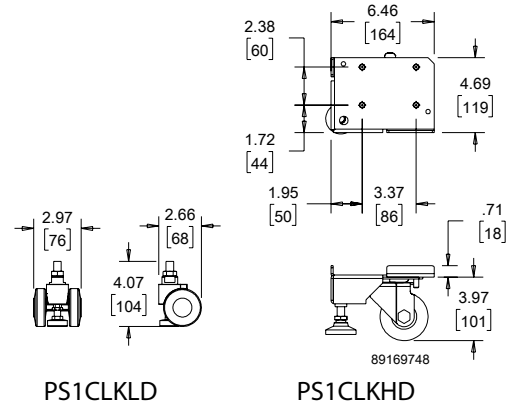

PS1CLKLD

PS1CLKHD

PROLINE S1 CABLE LACING PANEL

Vertical cable lacing panel provides tie-down points for small cable bundles. Cable lacing panel features toolless PDU mounting points to double as a full length PDU mounting bracket. Attaches to cabinet frame in the front-to-back depth direction and can be positioned independently of the rack angles. Can be installed with or in place of vertical cable managers. Compatible with cable and power management accessories:
- Frame Tie Down Brackets (PCMFTD10)
- D-Ring Cable Managers (ECM3DR10 and ECM6DR10)
- Cable Spools (PSPOOL and P4SPOOL)
- Fiber Management Spool (TOPTKSPL)

Catalog Number	AxBxC in./mm	Color
PS1CLP45UB	81.41 x 4.80 x 0.75 2068 x 122 x 19	Jet Black
PS1CLP45UW	81.41 x 4.80 x 0.75 2068 x 122 x 19	Signal White
PS1CLP48UB	87.32 x 4.80 x 0.75 2218 x 122 x 19	Jet Black
PS1CLP48UW	87.32 x 4.80 x 0.75 2218 x 122 x 19	Signal White

PROLINE S1 VERTICAL CABLE MANAGERS

Vertical Cable Managers are sold individually and attach to the cabinet rack angles. They provide a vertical open column for cables. Arrowhead fingers every 1.75 in. match rack unit spaces and allow for managing and protecting cables and ensuring proper bend radius. These cable managers are made of steel, painted RAL 9005 black, low-gloss polyester powder textured. The engineered composite arrowhead supporting fingers are black.
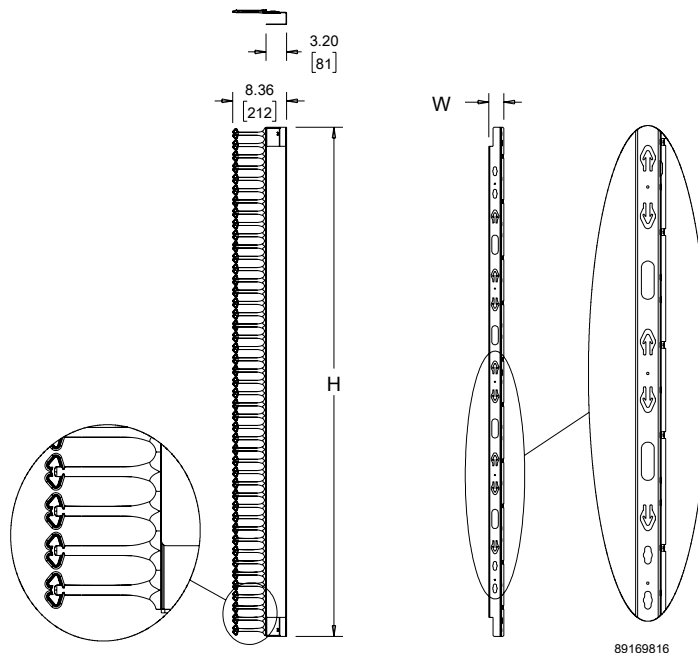
BULLETIN: DPS1

Standard Product

Catalog Number	H in./mm	W in./mm	Vertical Cross Section H x W in./mm	Vertical Cross Section Area sq. in.	Qty. 0.20-in. Dia. Cables at 70% Fill	Qty. 0.25-in. Dia. Cables at 75% Fill
PS1CM127	41.63 1057	2.33 59	1.76 x 8.18 44.6 x 207.7	14.40 9263	343	220
PS1CM217	79.03 2007	2.33 59	1.76 x 8.18 44.6 x 207.7	14.40 9263	343	220
PS1CM218	79.03 2007	4.30 109	3.72 x 8.18 94.6 x 207.7	30.43 19648	726	464
PS1CM237	81.97 2082	2.33 59	1.76 x 8.18 44.6 x 207.7	14.40 9263	343	220
PS1CM238	81.97 2082	4.30 109	3.72 x 8.18 94.6 x 207.7	30.43 19648	726	464

Vertical Cable Manager Selection Guide

Cabinet Size Nominal A x B (Height x Width)	19-in. Rack Angle, Centered	19-in. Rack Angle, Biased Left or Right	23-in. Rack Angle, Centered	23-in. Rack Angle, Biased Left or Right
1200 x 700	PS1CM127 (1 or 2)*	PS1CM127**	N/A	N/A
2150 x 700	PS1CM217 (1 or 2)*	PS1CM217**	N/A	N/A
2150 x 800	PS1CM218 (1 or 2)*	PS1CM218**	PS1CM217*	PS1CM218**
2300 x 700	PS1CM237 (1 or 2)*	PS1CM237**	N/A	N/A
2300 x 800	PS1CM238 (1 or 2)*	PS1CM238**	PS1CM237*	PS1CM238**

* Can be installed on right side, left side, or both sides. Order one for each location.

** Install one cable manager to open opposite side of bias.

3.20 [81]

8.36 [212]

W

H

89169816

nVent | HOFFMAN

COMBINATION LOCK HANDLE

Combination Lock Handle fits cabinet doors. The swing handle, 3-digit combination lock with master key override can easily be changed. Install using existing cam from standard handle.

BULLETIN: DCY

Catalog Number	Description	Use With
NCLH	Pull-out swing handle with combination lock and master key override	All ProLine S1 full doors

PROLINE S1 ALTERNATE TUMBLER LOCKING HANDLE

The ProLine S1 Alternate Locking Handle fits ProLine S1 cabinet doors, providing cabinet security for the components inside. The alternate key-lock is a different key than the standard, allowing for varying levels of cabinet access. The alternate 333 tumbler allows for the different levels of cabinet access or multiple clients within the same facility. Comes in single or 3-point latch options.

BULLETIN: DPY

Catalog Number	Description	Material	Color	Color Code
PKLH3	Locking Handle, 6.38x1.32x1.12, Plastic, 333 Key, 1-pt	Polyamide	Jet Black	RAL 9005
PKLHSD3	Locking Handle, 6.38x1.32x1.16, Plastic, 333 Key, 3-pt	Polyamide	Jet Black	RAL 9005

SIDE COVER LOCK

Fits in pre-punched hole to secure DataCom solid side from unauthorized entry.

BULLETIN: DPC

Catalog Number	Description	Key Code
PSCLO	Side Cover Lock	2233
PSCLO3	S1 Quarter-Turn, 3-Digit Lock	333

SECURITY ACCESS CONTROL EHANDLE

FEATURES

- Single or dual authentication
- Triple embedded proximity card reader. Supported RFID cards include:
  - MIFARE Classic 4k - UID
  - MIFARE Plus 2k - UID
  - MIRFARE DESFire 4k - UID
  - HIS iClass - UID
  - HID 125 kHz prox - CSN
  - EM125 kHz Prox - CSN
- Remote lock/unlock and remote monitoring
- Local lock status indicator with multi-color LED indicator
- Dual sided visible LED alarm beacons to indicate power, environmental, or security alarm status for the rack
- User customizable key lock for manual over-ride
- Embedded humidity sensor and additional environmental sensor port
- Local data storage of 200 user credentials and 500 local events
- Customizable alarm, LED status, and access configuration settings

Catalog Number	Description
EA9500	Access Control eHandle - RFID and Keypad
EA9502	Access Control eHandle - RFID
EA9530	Access Control eHandle iPDU Harness
EA9550	eHandle Sensor - Door Open/Close Temperature Sensor
EA9551	eHandle Sensor - Door Open/Close 3X Temperature Sensor

Note: Secuirty Access eHandle must be used in conjunction with a RackPower iPDU. Not supported with external management controllers and software.

APPLICATION

The security access control eHandle is an intelligent electromechanical locking system for server and networking cabinets. The eHandle seamlessly integrates with the network controller and RackPower iPDUs to serve as a hub for access control and environmental monitoring.

PROLINE GROUNDING KIT

The Grounding Kit allows a ProLine or ProLine G2 enclosure to be grounded to VDE specifications. Includes six 12-gauge wires 411 mm (16.19) long with ring terminations and M6 mounting hardware.

BULLETIN: P20

Catalog Number	Wire Size	Length Between Ring Terminals mm/in.	Ring Terminal Hole Diameter mm/in.
PGK	12 ga.	411	7
		16.19	.29

PROLINE S1 RACK ANGLES

Rack angles are sold in pairs that are RU marked on all sides. One side is tapped 10-32 while the other side is square hole (.375 x .375 in.). Both sides are spaced per EIA universal standard. Rack angles may be assembled in either tapped or square-hole configuration. Rack angles and mounting brackets are formed from heavy gauge steel and are polyester powder painted low-gloss, RAL 9005 black. All hardware and brackets are included for assembly into cabinet.

BULLETIN: DPS1

Standard Product

Catalog Number	Fits Cabinet A x B	Rack Units	Rack Unit Configuration
PS1RA126	1200 x 600	24	19-in.
PS1RA127	1200 x 700	24	19- or 23-in.
PS1RA216	2100 x 600	45	19-in.
PS1RA217	2100 x 700	45	19- or 23-in.
PS1RA218	2100 x 800	45	19- or 23-in.
PS1RA236	2300 x 600	48	19-in.
PS1RA237	2300 x 700	48	19-in. or 23-in.
PS1RA238	2300 x 800	48	19-in. or 23-in.

Tapped and Square Holes are per EIA 310-D Universal Rack Unit Spacing (1/2 in. x 5/8 in. x 5/8 in. x 1/2 in.)

FRAME TIE-DOWN BRACKET

The ProLine Frame VELCRO® Tie-Down Bracket provides an easy means to secure and bundle cables using any of the frame's rectangular holes. The bracket can be positioned parallel or perpendicular to the frame and needs no tools to install—just push into any hole and twist to fasten. Proper bend radius is easily maintained with the flexible Velcro tie-down, plus it provides easy initial and future cable installations. Bracket is made of a durable plastic. Both tie-down and bracket are black.

VELCRO is a trademark of VELCRO Industries B.V.

BULLETIN: DPY

Catalog Number	Description	Capacity at Max. Size	Pkg. Qty.
PCMFTD10	10-in. Velcro tie downs	55 CAT 6 cables	10

## FRONT-TO-BACK D-RING BRACKET

Manages cable routed between front and back of cabinet. Can be used with optional Universal D-Ring Brackets or Transition Brackets for increased flexibility in managing cables. Mounts to ProLine frame. Secures cable with D-Rings that snap open and closed for secure routing with easy access for wiring changes. D-Rings can be oriented for vertical, front-to-back or side-to-side cable management. RAL 9005 black polyester paint finish. Includes D-Rings and mounting hardware.

BULLETIN: DPY

| Catalog Number	Number of D-Rings	B mm/in.	Fits Enclosure Depth mm/in.
PFBDR8	3	640 25.20	800 31.50
PFBDR9	3	740 29.13	900 35.43
PFBDR10	4	840 33.07	1000 39.37
PFBDR11	5	940 37.01	1100 43.31
PFBDR12	5	1040 40.95	1200 47.24
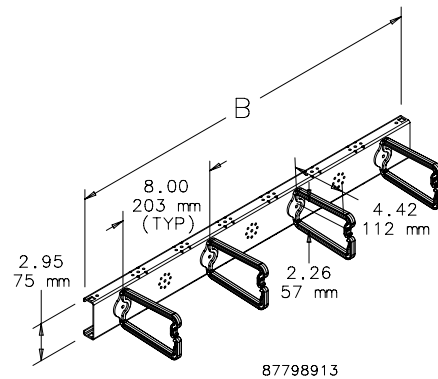
BRUSH STRIP KIT
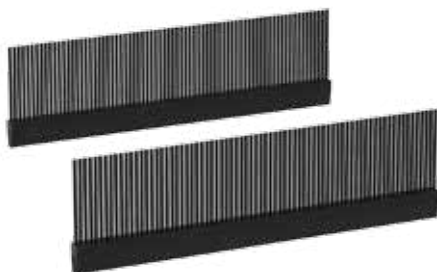
The ProLine S1 Brush Strip Kit provides a level of air flow management while providing a cable pass through. It has a single row of Nylon bristles attached to a flexible, black PVC mounting clip.

| Catalog Number	Fits Opening
PBSK1225	12 x 2.5 in. or up to 12 x 5 in. with quantity 2 overlapping

PDU MOUNTING BRACKET
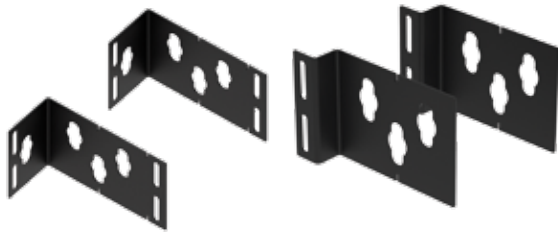
PDU mounting brackets allow PDUs to be installed to the cabinet frame or rack angles using many different configurations. Kit includes two brackets and mounting hardware.

BULLETIN: DPDU

Catalog Number	Color	Color Code	Finish	Thickness (ga.)	Pkg Qty
DPDU2	Jet Black	RAL 9005	Powder Coated	14	2
DPDU3	Jet Black	RAL 9005	Powder Coated	14	2

DPDU2

5.67
[144]

2.38
[60]

3.48
[88]

89179656

DPDU3

5.60
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.97
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3.48
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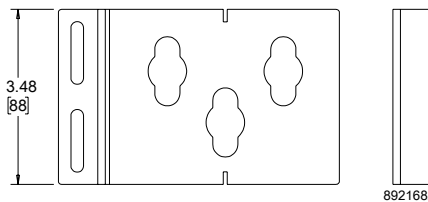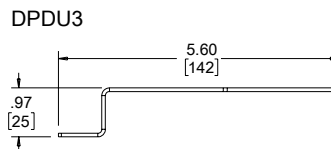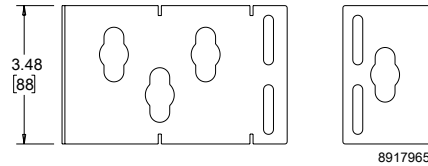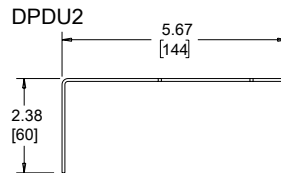
SCREW PACKAGES

Screw Packages are for mounting rack panels and equipment to rack angles.

BULLETIN: A80, DACCY

Catalog Number	Description	Color	Pkg. Qty.
ES1224	12-24 x 5/8 in. combo head	Plated	20
ES1224250	12-24 x 5/8 in. combo head	Plated	250
ES1224B	12-24 x 5/8in. combo head	Black	20
ES1224B250	12-24 x 5/8 in. combo head	Black	250
ASM5	M5 x 20 mm combo Head	Plated	20
ASM6	M6 x 16 mm combo head	Plated	20
ASM5T	M5 x 12 mm thread-forming Phillips hex head screws	Plated	20
ASM6250	M6 x 16 mm combo head	Plated	250
AS1032	10-32 x 5/8 in. combo head	Plated	20
AS1032250	10-32 x 5/8 in. combo head	Plated	250
AS1032B	10-32 x 5/8 in. combo head	Black	20

Use ASM5T on ProLine frame or ProLine S1 extruded holes.

CAGE NUT PACKAGE

Cage Nut Packages are for use with square-hole rack angles. Cage nuts are plated steel.

BULLETIN: DACCY

Catalog Number	Description	Pkg. Qty.
PM5CN	M5 cage nut	20
PM6CN	M6 cage nut	20
PM6CN250	M6 cage nut	250
P1032CN	10-32 cage nut	20
P1032CN250	10-32 cage nut	250
P1224CN	12-24 cage nut	20
P1224CN250	12-24 cage nut	250