

NEMA 12 Pre-Configured Micro Data Center (MDC)

specifications

Rack mount switches, servers, and storage devices shall be deployed and protected with a NEMA 12 Pre-Configured Micro Data Center (MDC) which meets EIA RS-310-D, UL 508A, NEMA (UL Type) 12, and IP55. The NEMA 12 Pre-Configured MDC shall be factory assembled to include the connectivity and cable management necessary to enable rapid installation of active equipment. The cabinet configuration shall be 42 RU and shall allow for installation of standard 29-inch (737mm) depth equipment. All metal elements within the cabinet shall be single-point bonded to ensure effective equipment grounding. The NEMA 12 Pre-Configured MDC shall be easily expandable by purchasing add-on kits and incorporate a set of four casters to simplify deployment. It shall include pre-installed mounting brackets for mounting a minimum of two and a maximum of four vertical PDUs.



technical information

Dimensions:	42 RU 82.1 in. (2085.5 mm) H 28.0 in. (711.1 mm) W 47.2 in. (1200 mm) D
Material:	Mild steel enclosure with RAL 7035 light gray polyester powder paint
Compliance:	EIA RS-310-D, UL 508A, NEMA (UL Type) 12, IP55 (IP54 with AC unit)
Static load rating:	2500 lbs.
Packaging:	Cabinet ships assembled, one per pallet

key features and benefits

NEMA 12 rated:	Provides equipment inside the enclosure a degree of protection against the ingress of solid foreign objects and water
Pre-configured solution:	Includes the cabinet, connectivity, and cable management in one-part number to simplify specification, ordering, and enable fast, repeatable integration
Expansion ready configuration:	Includes space for future expansion of server, storage, and related patching elements to allow for increased network capacity without requiring addition to control room footprint
Bonded structure:	Incorporates single-point bonded cabinet, ground bar system and ESD port to help ensure network reliability and prevent equipment failure
Integrated cable management with bend radius control:	Maintains bandwidth through the network for increased uptime
Panduit Certification Plussm System Warranty*:	25-year standards based performance warranty that applies to all registered links and/or channels in an eligible structural cabling system installation

applications

The NEMA 12 pre-configured MDC is designed to support an industrial automation and control systems (IACS) that can be deployed within a manufacturing environment. The NEMA MDC allows rack and DIN mount equipment to be quickly and reliably deployed while protecting the critical physical media that makes up the industrial network. It provides the link between the Corporate and Industrial Networks to

maintain network uptime, speed changes and troubleshooting, and manage network security. The system includes network, grounding and bonding, and cable management to support integrations of servers, switches, storage, network security, and other supporting devices in a complete logical-to-physical infrastructure solution design for high availability.

*To be eligible for the Certification Plus System Warranty, the system must be registered with Panduit, and must meet all requirements, including without limitation, the requirement that it be installed by a Panduit ONEsm Enterprise Structured Cabling Partner or an Industrial Automation Infrastructure Partner who has been accredited with the Deploy Competency and meets all Partner ONE Partner requirements. To learn more about the eligibility and registration requirements, please contact the Certification Plus System Warranty Program Manager. The Certification Plus System Warranty is subject to terms, conditions and limitations which can be seen on this sample Certification Plus System Warranty Certificate.

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42 RU, two solid side panels:	MDC82NN
42RU, one solid side panel, one side panel with cutout for 8-12k BTU AC:	MDC82NS
42RU, one solid side panel, one side panel with cutout for 20k BTU AC:	MDC82NL

NEMA MDC Add-On Kits

4 RU din-rail conversion kit:	IABDIN4
Fiber shelf:	FCE1UA + 4 FAPs
LC connector:	FAP12WAQDLZC
LC to LC patch cord:	FX2ERLNLNSNM002
Mini-Com® TX6™ PLUS STP jack module:	CJS6X88TGY-24
28 AWG shielded Category 6A patch cord:	STP28X**M^

Network security devices:

RJ45 breakout, red:	PSL-DCJB
RJ45 lock-in, red:	PSL-DCPLX
PDUs:	P24G01M (NEMA L6-30P) P24G06M (IEC 60309 2P+E)

DIN Mount Tiers for Industrial Switches

Without UPS:	ZDINS24
With UPS:	ZDINS25
Universal Voltage Isolation Barrier:	UVIB

Other Equipment, Ordered Separately

nVent SpectraCool AC Unit:	G52 Models (8-12k BTU/Hr.) for MDC82NS G57 Models (20k BTU/Hr.) for MDC82NL
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**For lengths ranging in meters: 0.5 – 10 meters (every 0.5m), 11 – 20 meters (every 1m), 25 – 40 meters (every 5m).

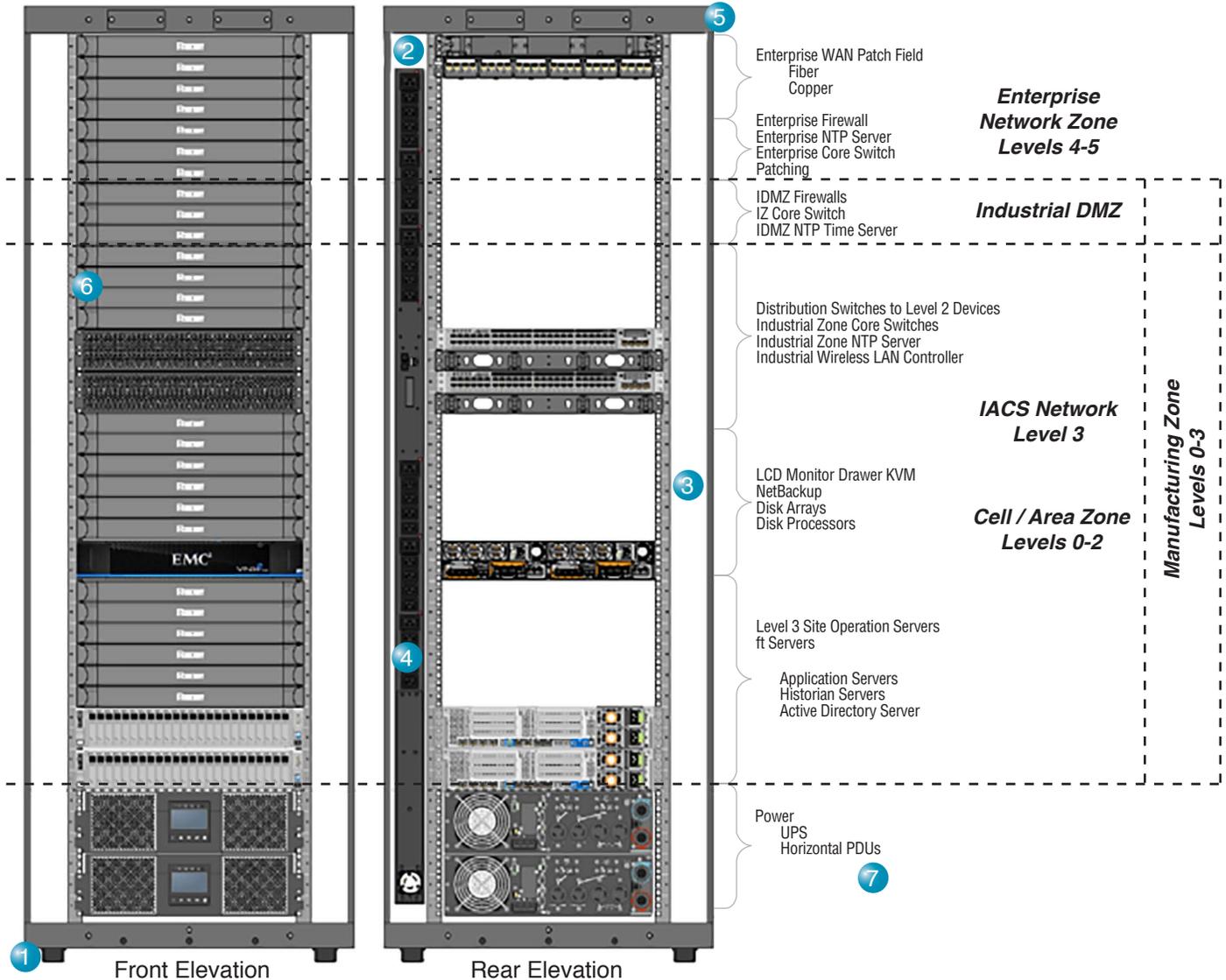
^For standard cable colors change ^ suffix to: IG (International Gray), BL (Black), BU (Blue), RD (Red), YL (Yellow), GR (Green), OR (Orange), VL (Violet).

NEMA 12 Pre-Configured Micro Data Center (MDC)

A micro data center or MDC is a versatile combination of hardware, software and cabling that serves as an end-to-end networking hub, sized to serve the demands of a manufacturing environment. Panduit's pre-configured MDCs are designed and validated to allow a physical layout that facilitates deployment of best-in-class logical network architectures.

82" Micro Data Center (Full Rack)

The 42 RU NEMA MDC is designed to protect active hardware and enable up to 200 devices within the manufacturing floor. It is designed to house switches, firewalls, storage, servers, and UPS equipment.



- 1 Delivered with casters installed.
- 2 24-port patch panel CPPL24WBLY pre-installed to enable structured cabling.
- 3 Vertical cable managers are pre-installed to route and protect data cabling.
- 4 Mounting brackets pre-installed for mounting a minimum of two and a maximum of four vertical PDUs.
- 5 Includes fiber optic patching enclosure FCE1UA with space for 4 FAPs.
- 6 Blanking panels included to optimize air flow within micro data center.
- 7 Delivered with box which includes all necessary patch cords, jacks, and other accessories needed to finish integration of popular micro data center configurations.

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PART INCLUDES:

- ONE SOLID SIDE PANEL
- ONE SIDE PANEL (SOLID, SMALL OR LARGE AC OPENINGS)
- NETWORK CABLING AND CONNECTIVITY
- (18) STP28X-SERIES CABLES TO CONNECT SERVERS AND SWITCHES IN INTERNATIONAL GREY AND BLUE COLORS
- CJS6X88TGY CAT 6A SHIELDED JACKS PROVIDED
- TOOLLESS BLANKING PANELS
- FCE1UA - FIBER MANAGEMENT TRAY
- CPPL24WBLY - 24 PORT PATCH PANEL AND BLANKS
- VERTICAL CABLE MANAGEMENT FINGERS
- CABINET GROUNDING
- RGRB19CN - UNIVERSAL 20 PORT GROUND BAR
- RGCBNJ660P22 - CBN GROUNDING KIT
- 55" EQUIPMENT GROUNDING JUMPERS
- ACCESSORIES
- HOOK AND LOOP
- 12-24 BONDING AND STANDARD CAGE NUTS AND SCREWS
- ESD PORTS AND WRIST STRAPS

Dimensions are in inches. [Dimensions in brackets are metric.]

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