Switch Ready Network Zone System

<u>specifications</u>

The switch ready network zone system shall include copper/fiber uplinks and downlinks optimized for industrial Ethernet switches. System shall incorporate redundant power supplies. The enclosure shall be UL Type 4/12/4X and IP66 rated. A removable, pre-engineered back plate with DIN rails shall be incorporated in the enclosure. Pre-installed accessory side panels, fiber slack spool, and L rings shall be included for cable management. The door shall be secured with 3mm double bit or slotted latch drive feature. The door shall hinge on the right or left. Class 2 power circuits shall be pre-wired, labeled, and tested. A barrier shall be present to isolate IT personnel from high voltage power circuit.



technical information

Standards:	UL 508A Standard for Industrial Control Panels, UL Type 4/12 or 4X, IP66 Rated, CE
Dimensions:	Z23R: 36.0"H x 24.0"W x 11.7"D (914mm x 610mm x 297mm) Z22R: 24.0"H x 24.0"W x 11.7"D (610mm x 610mm x 297mm)
Color and material:	Enclosures: Gray, 14 gauge cold roll steel or 316 stainless steel Back panels: 14 gauge galvannealed steel or 304 stainless steel
Thermal analysis:	Validated to 40°C ambient outside of enclosure or 60°C maximum within enclosure at up to 95% (non-condensing) humidity
Installation:	Wall mount with optional outside-mount flange

key features and benefits

Switch ready solution:	Reduces time required for planning, designing, procurement, and installation, resulting in simpler specification and faster implementation					
Designed to accept customer supplied industrial switches:	Offer management and diagnostics from within IT and controls environments to optimize network traffic					
Copper/fiber uplinks or patch field and copper/fiber connectivity:	Enables troubleshooting of network connections and verification of field terminations					
Included redundant power supplies:	Minimize the risk of equipment failure for improved network reliability					
Isolation barrier:	Segregates higher line voltage from lower voltage switch for increased safety					
Bonding provisions and grounding bar:	Ensure path to ground to protect personnel and equipment					
Gland plate:	Allows quick and easy access to machine ingress points into enclosure					
Detailed installation guide:	Provides easy, repeatable design instructions assuring consistency and saving time on the job-site					

<u>applications</u>

The Panduit Switch Ready Network Zone System is designed to rapidly deploy an EtherNet/IP*** network between the enterprise and plant floor. Copper/fiber connectivity and power features minimize engineering and installation time resulting in faster implementation. The Switch Ready Network Zone System provides usability similar to IT switches for industrial switches on the plant floor. This ensures that management and control of the network does not get in the way of making the most effective use of available network data.

With UL Type 4/12/4X and IP66 ratings, the enclosures provide reliability and high performance, as an integral component of the end-to-end solution for Industrial Networks.

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***EtherNet/IP is a trademark of ODVA.



SPECIFICATION SHEET

Switch Ready Network Zone System

See part number table on pages 2-3

Related Products

PanZone® NEMA 4X Rated Compression Fittings

Cable diameters
0.115" – 0.250": PZNF1
Cable diameters
0.230" – 0.395": PZNF2
Cable diameters
0.170" – 0.450": PZNF3
Drain kit: PZNDVK

IndustrialNet™ TX6™ Connectors

Category 6
UTP bulkhead
connector: IAEBH6
Category 6
STP bulkhead
connector: IAEBH6S

Fiber Uplink Accessories

Surface mount fiber box: CBXF6BL-AY LC OptiCam® connector: FLCDMCXAQY LC connector module: CMDSAQLCBL LC OM3 patch cord: F92ERLNLNSNM001

Opti-Core® Interlocking
Armored Cable: FOPRX12Y

DIN Rail Patching Accessories

Mini-Com® Copper
8-Port DIN Rail
Patch Panel: CDPP8RG
Mini-Com® Fiber
8-Port DIN Rail
Patch Panel: FDME8RG
Mini-Com® Single
Port DIN Rail

Mount Adapter: CADIN1IG^ IndustrialNet™ TX6™ PLUS

Patch Cords

UTP with
dust cap: IUTPSP3BL^^
UTP without
dust cap IUTPSPNC3BL^^
Shielded with
dust cap: ISTPSP1MBL^^^

Shielded without dust cap: ISTPSPNC1MBL^^^

TX6500™ Copper Cable

Category 6, UTP: PUR6504BU-UY

Suggested Allen-Bradley* Stratix** products, available from Rockwell Automation*

1783-MX08T Stratix 8000 copper expansion module 1783-MX08F Stratix 8000 fiber expansion module 1783-BMS10CGN Stratix 5700** 10-port switch with Network Address Translation (NAT) 1783-BMS20CGN Stratix 5700 20-port switch with NAT

1783-MS10T Stratix 8000** switch

^For standard colors other than International Gray, replace IG in part number with

Gray, replace IG in part number with BL (Black), El (Electric Ivory), IW (Off White), or WH (White).

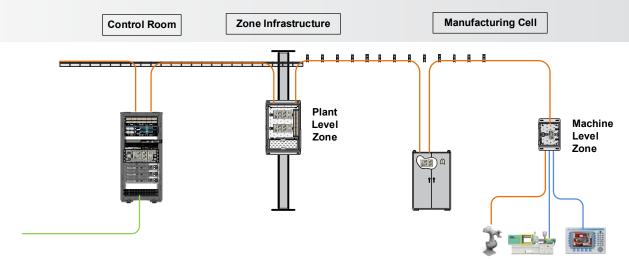
^For lengths other than 3 feet (5, 7, 10, 15, or 20 feet) change the length designation in the part number to the desired length.

^^For lengths other than 1 meter (2, 3, or 5 meters) change the length designation in the part number to the desired length.

Switch Ready Network Zone System

Deploying Zone Network Topology

The Panduit building block architecture for industrial networks is a highly effective way to deploy EtherNet/IP*** solutions in a plant floor environment. Panduit's network zone systems building block helps to deploy switches from Rockwell Automation* and Cisco**** and provide a platform to improve manageability, localize network traffic, and limit Layer 2 broadcast domains‡. The network zone systems allow all cables within a cell/area zone to be managed and patched within a single enclosure. By using a zone cabling architecture, network cabling becomes easier to locate, manage, and maintain because each additional device is routed within the same pathways and enclosure. Managed cabling decreases the number of home runs throughout a facility and reduces abandoned cable in plenum spaces, to make the workplace run more efficiently and safely.



Following a zone topology with the Panduit building block architecture creates a highly scalable and flexible network deployment.

Part number	Layout Image	Enclosure Type	Industrial Switch(es)	Downlink Port Connectivity Provided	Downlink Patch Field	Uplink Port Connectivity Provided	Power Infrastructure	Power Input	Din Rail Mounting	Cable Management	Isolation Barrier	Gland Plate
Z23R-S14	4/12 Stee 4X 316 St 4X 316 St 4/12 Stee 4/12 Stee	4/12 Steel	(1) user defined industrial switch with max power of 40 watts at 24 Vdc	(16) Cat 6 UTP jacks and cords	19" 48-port patch panel CPP48WBLY	(6) LC adaptors, (2) LC patch cords	Redundant power: (2) Allen-Bradley* 80 Watt 24Vdc power supplies. Includes terminal blocks, disconnects, wiring.	100-250 Vac Single Phase	(2) 16.7 inch long DIN rails	7 inch deep strain relief bar and adjustable ring managers	Barrier to cover high voltage equipment on lower DIN rail	One removable machinable gland plate
Z23R-S14S		4/12 Steel		(16) Cat 6 STP jacks and cords		(6) LC adaptors, (2) LC patch cords						
Z23R-614		4X 316 SS		(16) Cat 6 UTP jacks and cords		(6) LC adaptors, (2) LC patch cords						
Z23R-614S		4X 316 SS		(16) Cat 6 STP jacks and cords		(6) LC adaptors, (2) LC patch cords						
Z23R-S24		4/12 Steel	(2) user defined industrial switches with max power of 40 watts	(16) Cat 6 UTP jacks and cords		(6) LC adaptors, (4) LC patch cords						
Z23R-S24S		4/12 Steel		(16) Cat 6 STP jacks and cords		(6) LC adaptors, (4) LC patch cords						
Z23R-624		4X 316 SS		(16) Cat 6 UTP jacks and cords		(6) LC adaptors, (4) LC patch cords						
Z23R-624S		4X 316 SS	at 24 Vdc	(16) Cat 6 STP jacks and cords		(6) LC adaptors, (4) LC patch cords						
Z22R-S14		4/12 Steel		(8) Cat 6 UTP jacks and cords	(1) 8-port patch panel CDPP8RG	(6) LC adaptors, (2) LC patch cords						
Z22R-S14S		4/12 Steel	(1) user defined industrial switch with max power of 40 watts at 24 Vdc	(8) Cat 6 STP jacks and cords		(6) LC adaptors, (2) LC patch cords						
Z22R-614		4X 316 SS		(8) Cat 6 UTP jacks and cords		(6) LC adaptors, (2) LC patch cords						
Z22R-614S		4X 316 SS		(8) Cat 6 STP jacks and cords		(6) LC adaptors, (2) LC patch cords						
Z22R-S24		4/12 Steel	(2) user defined industrial switches with max power of 40 watts	(16) Cat 6 UTP jacks and cords	(2) 8-port patch panels CDPP8RG	(6) LC adaptors, (4) LC patch cords						
Z22R-S24S		4/12 Steel		(16) Cat 6 STP jacks and cords		(6) LC adaptors, (4) LC patch cords						
Z22R-614		4X 316 SS		(16) Cat 6 UTP jacks and cords		(6) LC adaptors, (4) LC patch cords						
Z22R-624S		4X 316 SS	at 24 Vdc	(16) Cat 6 STP jacks and cords		(6) LC adaptors, (4) LC patch cords						

Leveraging the Rockwell Automation* Integrated Architecture** technology simplifies switch configuration and integration while providing machine-based diagnostics and troubleshooting tools. Stratix** Industrial Ethernet Switches also leverage the Cisco**** operating system, bringing the world's leading switching technology to the plant floor environment. Advanced switch feature sets include: STP/RSTP/MST, Resilient Ethernet Protocol (REP), Flexlinks, EtherChannel (link aggregation), QoS, IGMP snooping with querier, VLANs with trunking, IEEE 1588 PTP v2, IPv6 support, storm control with alarming, egress traffic shaping; compatible with Cisco**** Network Assistant (CNA) and CiscoWorks.

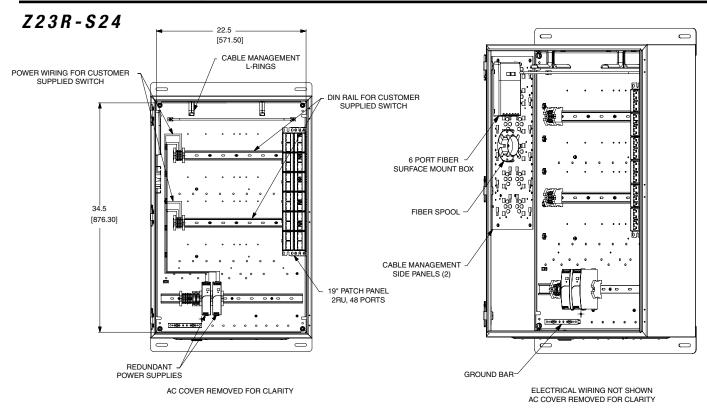
[‡] For additional reference see the Panduit Popular Configuration Drawing "Overview of Industrial Switch Deployment" PCD0001.

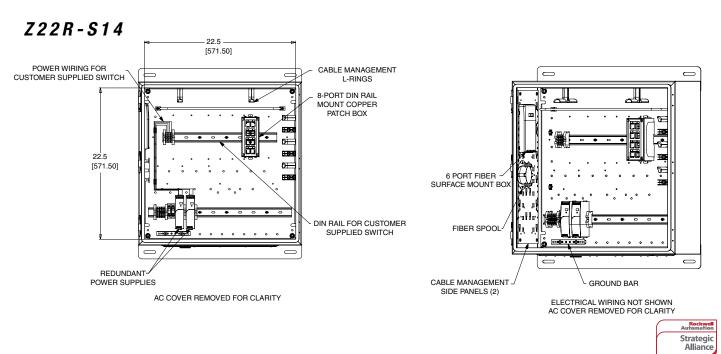
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Switch Ready Network Zone System

configuration options





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