Universal Network Zone System

**Specifications**

The universal network zone system shall include copper/fiber uplinks and downlinks optimized for industrial Ethernet switches. System shall incorporate redundant power supplies and optional UPS and PoE power supply. The enclosure shall be CE, IP66 rated, UL Type 4/12/4X and UL 508A. 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:** CE, IP66 Rated, UL Type 4/12 or 4X, UL 508A Standard for Industrial Control Panels

**Dimensions:**
- Z23U: 914mm H x 610mm W x 297mm D
- Z22U: 610mm H x 610mm W x 297mm D

**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 up to 75% faster implementation

**Universal design:** Works with most DIN mount industrial Ethernet switches, providing design flexibility

**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

**Optional UPS:** Prevents rebooting of switch and loss of network during power outages

**Optional PoE:** Provides 48Vdc power to the switch for PoE devices to simplify PoE capable deployments and save money on the purchase of PoE injectors

**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

**Applications**

The Panduit Universal Network Zone System is designed to rapidly deploy an industrial Ethernet network between the enterprise and plant floor. Copper/fiber connectivity and power features minimize engineering and installation time resulting in faster implementation. The Universal 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 CE, IP66 rating and UL Type 4/12/4X, the enclosures provide reliability and high performance, as an integral component of the end-to-end solution for Industrial Networks.

www.panduit.com/networkzone
Deploying Zone Network Topology

The Panduit® building block architecture for industrial networks is a highly effective way to deploy industrial Ethernet solutions in a plant floor environment. Panduit’s network zone systems building block helps to deploy industrial switches 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.

Universal Network Zone System

Universal Network Zone Systems - More options available at www.panduit.com/networkzone

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Layout Image</th>
<th>Enclosure Type</th>
<th>Industrial Switch(es)</th>
<th>Downlink Port Connectivity Provided</th>
<th>Downlink Patch Field</th>
<th>Uplink Port Connectivity Provided</th>
<th>Power Infrastructure</th>
<th>Power Input</th>
<th>Din Rail Mounting</th>
<th>Cable Management</th>
<th>Isolation Barrier</th>
<th>Gland Plate</th>
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</thead>
<tbody>
<tr>
<td>Z23U-S21</td>
<td><img src="image1.png" alt="Image" /></td>
<td>4/12 Steel</td>
<td>(1 or 2) user defined industrial DIN mount switches with max power dissipation of 42 watts at 24Vdc</td>
<td>(16) Cat 6 UTP jacks and cords</td>
<td>19” 48-port patch panel CPP48WBLY</td>
<td>(6) LC adaptors, (4) LC OM3 patch cords</td>
<td>Redundant 91.2W 24Vdc power supplies with battery based UPS</td>
<td>Redundant 91.2W 24Vdc power supplies</td>
<td>(3) 424mm long DIN rails</td>
<td>100-250 Vac Single Phase</td>
<td>Barrier to cover high voltage equipment on lower DIN rail</td>
<td>One removable machinable gland plate</td>
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<tr>
<td>Z23U-S21</td>
<td><img src="image2.png" alt="Image" /></td>
<td>4X 316 SS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Redundant 91.2W 24Vdc power supplies</td>
<td>Redundant 91.2W 24Vdc power supplies</td>
<td>(2) 424mm long DIN rails</td>
<td>178mm deep strain relief bar and adjustable ring managers</td>
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<tr>
<td>Z23U-S24</td>
<td><img src="image3.png" alt="Image" /></td>
<td>4/12 Steel</td>
<td>(1 or 2) user defined industrial DIN mount switches with max power dissipation of 42 watts at 24Vdc</td>
<td>(8) Cat 6 UTP jacks and cords</td>
<td>(1) 8-port patch panel CPP8RG</td>
<td>(6) LC adaptors, (2) LC OM3 patch cords</td>
<td>Redundant 91.2W 24Vdc power supplies with battery based UPS</td>
<td>Redundant 91.2W 24Vdc power supplies</td>
<td>(2) 424mm long DIN rails</td>
<td>100-250 Vac Single Phase</td>
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<td>Z23U-S26</td>
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<td>Redundant 91.2W 24Vdc power supplies with battery based UPS, and 48Vdc power supply for PoE</td>
<td>Redundant 91.2W 24Vdc power supplies</td>
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<td>178mm deep strain relief bar and adjustable ring managers</td>
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<td>Z23U-S11</td>
<td><img src="image5.png" alt="Image" /></td>
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<td>(8) Cat 6 UTP jacks and cords</td>
<td>(1) 8-port patch panel CPP8RG</td>
<td>(6) LC adaptors, (2) LC OM3 patch cords</td>
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<td>Redundant 91.2W 24Vdc power supplies</td>
<td>(2) 424mm long DIN rails</td>
<td>100-250 Vac Single Phase</td>
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<tr>
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For systems with STP Category 6A patch cords and jacks, add an “S” to the end of the part number, for example Z23U-S21 comes with UTP copper connectivity, while Z23U-S21S comes with STP copper connectivity.

For additional reference see the Panduit Popular Configuration Drawing “Overview of Industrial Switch Deployment” PCD0001.