4 **3** **2** **1**

Enterprise Network

Use this drawing when:
Designing the connectivity and physical infrastructure for a warehouse that contains conveyors, robots, and other equipment that requires power & network connections.

D **D**

1 **Dielectric Double Jacketed Fiber Cable**

Uplink connection back to Industrial Distribution Frame

Industrial Physical Network

IoT Device Connectivity

2 **Cat 6 & 6A cable**

Wired Ethernet connection to Wireless Access Point

10 **Field Terminable Plug Cat6A**

11 **Indoor Field Cord**

24" x 36" Universal Network Zone System with industrial switches. Redundant power supplies, UPS, copper and fiber cabling mgmt.

12

C **C**

I/O & Sensor Connectivity

3 **IndustrialNet™ Cat 5e, 6, & 6A 600V Cable**

10 **Shielded Field Terminable Plug**

M12 Field Term Plug, D and X code for field devices.

9

4 **High Flex Cable**

Conveyor sensor Connections - Ethernet connectivity or hardwire

Zone Controller

B **B**

Control Panel

Conveyor

Label Printer

Scan Tunnel Part ID & Scale

6 **600V Industrial Patch Cords**

7 **DIN mount module adapter**

8 **M12 to RJ45 adaptors**

Network Panel

Variable Speed Drive

5 **RJ45 Jack Module**

Control Panel Connectivity

A **A**

PCD013-DEC2022-ENG

PANDUIT™

Warehouse Machinery Material Handling

4 **3** **2** **1**

Bill of Materials

Ref.	Part Number	Description
	Fiber and Copper Cable	
1	FOJDZ12**	OM4 fiber, Dielectric Double Jacketed (indoor/outdoor), Riser, Low Smoke Zero Halogen, Multimode, 12 fiber
1	FSJD912**	OS2 fiber, Dielectric Double Jacketed (indoor/outdoor), Riser, Low Smoke Zero Halogen, Singlemode, 12 fiber
2	PUR6AV04WH-G	TX6A™ Vari-MaTriX Cat 6A U/UTP Riser copper cable is constructed of 23 AWG copper conductors with HDPE insulation
2	PUR6C04BU-U	TX6™ Cat 6 U/UTP copper cable is constructed of 23 AWG copper conductors with HDPE insulation.
3	IFRH6C04BL-UG	Copper Cable, Industrial 600V, Category 6 4-pair, 23/1 AWG Solid, F/UTP, CMR, Black.1000ft reel
4	ISFCH6X04ATL-UG	Copper Cable, Industrial, Category 6A 4-pair, 24/7 AWG Stranded, SF/UTP, CM/CMX, 600V, Oil Res., Teal, 1000ft reel
	Connectors, Cord sets, and Patch Cords	
5	CJ6X88TGBL	Category 6A, RJ45, 8-position, 8 wire, 10 Gb/s UTP Mini-com universal jack module, black
5	CJS6X88TGY	Category 6A, RJ45, 8-position, 8 wire, 10 Gb/s STP Mini-com universal jack module, black
6	ISTPH6X1MTL*	Patch cord, IndustrialNet™, Category 6A, shielded, 600V, RJ45 plug to RJ45 plug, teal, 1 meter.
6	ISTPHCH2MTL*	Patch cord, IndustrialNet™, Category 5e, shielded, 600V, RJ45 plug to RJ45 plug, teal, 2 meter.
7	CADIN1IG	Mini-Com® DIN Rail Mount Adapter mounts to standard 35mm DIN rails and accepts any single port Mini-Com® Module.
7	CADIN1IG-S	Shielded Mini-Com® DIN Rail Mount Adapter mounts to standard 35mm DIN rails and accepts any single port Mini-Com® Module.
8	ICAM12DRJS	Category 5e, M12 D-code to RJ45 industrial adapter, panel mount
8	ICAM12XRJS	M12 X-Code Female to RJ45 Jack, industrial adapter, panel mount
9	ISPS5E44MFA	IndustrialNet™, 4-position, M12 D-code plug
9	ISPS6A88MFA	IndustrialNet™, 8-position, M12 X-Code plug
10	FP6X88MTG	TX6A, Category 6A UTP Field Term RJ45 Plug is a simple-to-attach plug for field termination of 4-pair unshielded twisted pair cable.
10	FPS6X88MTG	TX6A, Category 6A UTP Shielded Field Term RJ45 Plug is a simple-to-attach plug for field termination of 4-pair shielded twisted pair cable.
11	FC-ICCP0.5MBU*	Category 6A UTP FieldCord easily connects network devices, especially those with limited space for cords or RJ45 plugs, to network cabling.
	Network Zone System	
12	Z23C-S	Pre-Configured Network Zone System, 24" x 36", mild steel enclosure, for two industrial switches, includes (16) Cat 6 UTP copper patch cords and jacks, (4) MM LC fiber patch cords with (6) adaptors, backplane and cable management. Also available in stainless steel or sloped versions and various levels of integration.

*Available in a variety of lengths.

**Additional fiber counts available.

Smart Control Panel Solutions Brochure (Literature No. CPCB232) available on *www.panduit.com*

About this Configuration

With the continued extension of Ethernet-enabled devices and machines to the demanding environments of a warehouse/logistics floor space, industrial equipment has a growing need to be connected in a robust and smarter way. With Panduit, the deployment of this architecture becomes much easier. From overmolded cables, 600V ratings, shielded cable and connectivity, to cable management, and infrastructure solutions, Panduit has the products needed to make your industrial network more secure and future ready.

Overmolded Cable

Overmolding cable is an injection molding process in which two materials are bonded to combine the wire and connector into a single seamless piece. This process provides a more robust product for industrial environments. Panduit has vast experience in molding, resulting in a high-quality product that exceeds the standards. A wide variety of solutions are available with Panduit's overmolded technology.

600V Rated Cable

Network cabling is not designed or intended to carry high voltages. Network cables can be exposed to high voltage cabling in UL508A control panels, and near manufacturing machines. Panduit offers network cable solutions that meet the 600V Appliance Wire Material (AWM) requirements.

PANDUIT™