## TIA-1005-A M.I.C.E. Rated Product Selection Guide





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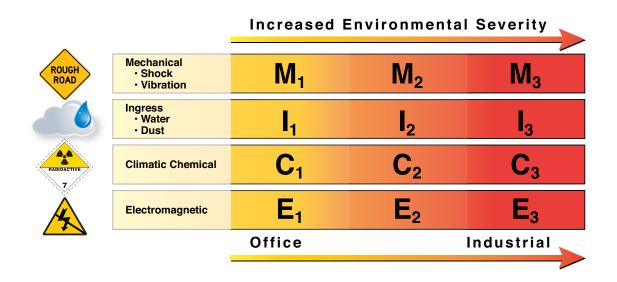
When designing the physical infrastructure to support network communications in a manufacturing location, TIA-1005-A is a standard that must be considered.

According to the TIA-1005-A standard, there are three basic types of industrial areas:

- Factory Floor
- Work Area
- Automation Island

Designing for the manufacturing environment requires an intimate knowledge of these areas to ensure the infrastructure supports the different environments found on the plant floor. Considerations such as shock and vibration, handling of water or dust, temperature, washdown areas, exposure to acids or oil mixtures and electromagnetic noise must be taken into account when selecting solutions to support these harsh environments.

Environmental classifications and ratings based on Mechanical, Ingress, Climatic/Chemical, Electro Magnetic (M.I.C.E.) attributes provide a method of categorizing the environmental classes required for each of the industrial areas and are rated as 1 = low, 2 = medium, and 3 = high.



Whether you are designing for the factory floor, work area or automation island, Panduit offers solutions that meet the TIA-1005-A M.I.C.E. guidelines. This selection guide provides the industrial physical infrastructure designer with detailed M.I.C.E. information about each of Panduit's network products typically considered in industrial environments. For an expanded offering of level 1 parts that may be used in your industrial network, visit panduit.com.

For additional information on M.I.C.E. ratings contact our technical support team at techsupport@panduit.com or call 800-777-3300.

For more information about the TIA-1005-A standard, visit tiaonline.org.

																	Deta	iled M.	I.C.E.	Rati	ng											
			M.I.	^ E						N	/lech	anica	al				In	gress				CI	imati	c/Cl	nemi	cal					EMI	
		(F		C.E. Ratin	g)			N	<b>1</b> 12					М	3		l <sub>2</sub>	l <sub>3</sub>			C,	2					C <sub>3</sub>			Ε,	E <sub>2</sub>	E <sub>3</sub>
LEGEND:  • = Acceptable for use in Environment  x = Not	NOTE: In the case a lower M.I.C.E. rated part is needed to be used in a higher M.I.C.E. rated environment please contact Tech Support for further guidance on the application.					100 ms-1	7mm/20ms-1	300N	1100N/150mm	100		250 ms-1	15mm/50 ms-1	2	2200N/150mm				-25°C to +70°C	1,0 °C/min	See C3	< 5,0 ppm			-40°C to +70°C	3,0 °C/min	1120 W/III			Magnetic Field	Magnetic Field	gnetic Field
Acceptable for use in Environment  - = Not Applicable  c = Contact Tech Support	*Tensile Connected: This aspect of environmental classification is installation specific and should be considered in association with IEC 61918 and the appropriate component specification. The 300 and 500 N numbers were used as a reference to differentiate the levels.	М	ı	С	Е	shock	vibration	*Tensile Connected	compression	impact resistance	torsion	shock	vibration	*Tensile Connected	compression	torsion	IP 54/65	IP 67	operation temp.	temp. change	sun radiation	oil resistance	res. liquid chemicals	res. gaseous agents	operation temp.	temp. change	sul Tadiation	res liquid chemicals	res. gaseous agents	, Transients, RF,	ESD, Transients, RF, Ma	ESD, Transients, RF, Magnetic Field
Part Number	Product Description																															
Copper Cable																																
Category 7																																
PSM7004BU-KEM	Copper cable, Category 7, 4-pair, 23 AWG, S/FTP, LSZH, Blue, Euro pallet, 3280 ft./1000m reel.	2	_	2	2	•	•	_	•	•	•						_			•		•	С	С	•	•	•				•	
PSMD7004BL-LED	Copper cable, MUD-resistant, Category 7, 4-pair, 22 AWG stranded, S/FTP, LSZH (IEC 60332-3), SHF2, Black, Euro pallet,1640 ft./500m reel.	2	_	2	2	•	•	-	•	•	•						-			•		•	С	С	•	•					•	
PSMDA7004BL-LED	Copper cable, armored, MUD-resistant, Category 7, 4-pair, 22 AWG stranded, S/FTP, LSZH (IEC 60332-3), SHF2, Black, Euro pallet, 1640 ft./500m reel.	2	_	2	2	•	•	_	•	•	•						_			•		•	С	С	•	1	•				•	
Category 6A																																
ISX6X04A*-LED	Copper cable, industrial, Category 6A 4-pair, 24/7 AWG stranded, S/FTP, PUR, 1640 ft./500m reel.	2	-	2	2	•	•	-	•	•	•						-			•		•	С	С	•		•				•	
ISFCH6X04A*-UG	Copper cable, industrial, 600 V, Category 6A, High Flex, 4-pair, 24/7 AWG stranded, SF/UTP, CM, 1000 ft./305m reel.	2	-	2	2	•	•	-	•	•	•						-			•		•	С	С	•	•	•				•	
ISFCH6X04B*-UG	Copper cable, industrial, 600 V, Category 6A, High Flex, 4-pair, 26/7 AWG stranded, SF/UTP, CM, 1000 ft./305m reel.	2	_	2	2	•	•	-	•	•	•						_			•		•	С	С	•	•					•	
PUP6AHD04*-G	Copper cable, Category 6A, 4-pair, 23 AWG stranded, UTP, CMP, 1,000 ft./305m reel.	1	-	1	1	х	-	х	x	х	x						-		х	х	х	х	х	x						•		
Category 6																				,												
IFRH6C04BL-UG	Copper cable, industrial, 600 V, Category 6, 4-pair, 23/1 AWG, F/UTP, CMR, Black, 1000 ft./305m reel.	2	-	2	2	•	•	-	•	•	•						-		-20	•		•	С	С		(					•	
Category 5e																																
ISFCH5C02A*-XG	Copper cable, industrial 600 V, Category 5e, High Flex, 2-pair, 24/7 AWG stranded, SF/UTP, CM, 1000 ft./305m reel.	2	_	2	2	•	•	-	•	•	•						-			•		•	С	С	•	•					•	
ISFCH5C04A*-XG	Copper cable, industrial 600 V, Category 5e, High Flex, 4-pair, 24/7 AWG stranded, SF/UTP, CM, 1000 ft./305m reel.	2	-	2	2	•	•	-	•	•	•						-			•		•	С	С	•	•					•	
ISFX5502A*-LED	Copper cable, industrial, Category 5e, 2-pair, 24/7 AWG stranded, SF/UTP, PUR, 1640 ft./500m reel.	2	-	2	2	•	•	-	•	•	•						_			•		•	С	С	•	•	•				•	
IFRH5C04*-UG	Copper cable, industrial, 600 V, Category 5e, 4-pair, 24/1 AWG solid, F/UTP, CMR, 1000 ft./305m reel.	2	-	2	2	•	•	-	•	•	•						_		-20	•		•	С	С							•	
IURHT5C04*-UG	Copper cable, industrial 600 V PLTC, Category 5e, 4-pair, 22/1 AWG, U/UTP, CMR, 1000 ft./305m reel.	2	-	2	1	•	•	-	•	•	•						-		-20	•		•	С	С		•				•		
Single Pair Ethernet	T1-L																															
SP-SFCS1IG-CEG	Single Pair Ethernet shielded copper cable, 18/7 AWG stranded, S/FTP, CM/CMR, 1000 ft./305m reel in a box.	-	-	-	-																											

<sup>\*</sup>Available in multiple colors.

																Detail	ed M.I	.C.E.	Rati	ng												
		м.	I.C.E						Med	hani	ical					Ingr	ess				Cli	mati	ic/C	hem	ical					E	ЕМІ	
		(Final					M <sub>2</sub>	<u>:</u>				ı	M <sub>3</sub>			l <sub>2</sub>	l <sub>3</sub>			C,						C <sub>3</sub>				E,	E <sub>2</sub>	E <sub>3</sub>
LEGEND:  • = Acceptable for use in Environment  x = Not	NOTE: In the case a lower M.I.C.E. rated part is needed to be used in a higher M.I.C.E. rated environment please contact Tech Support for further guidance on the application.				100 ms-1	7mm/20ms-1	300N	1100N/150mm	107	250 ms-1	15mm/50 ms-1	2	2200N/150mm	307				-25°C to +70°C	1,0 °C/min	See C3	< 5,0 ppm			-40°C to +70°C	9	1120 W/m²	< 500 ppm					Magnetic Field
Acceptable for use in Environment  - = Not Applicable  c = Contact Tech Support	*Tensile Connected: This aspect of environmental classification is installation specific and should be considered in association with IEC 61918 and the appropriate component specification. The 300 and 500 N numbers were used as a reference to differentiate the levels.	M I	С	E	shock	vibration	*Tensile Connected	ssion	impact resistance		u	Connected	compression	impact resistance	torsion	IP 54/65	IP 67	operation temp.	temp. change	sun radiation	oil resistance	res. liquid chemicals	res. gaseous agents	operation temp.	o.	sun radiation	JCe .	res. liquid chemicals	gaseous agents	, Transients, RF,	Transients, RF,	ESD, Transients, RF, Ma
Part Number	Product Description																															
COPPER CONNECT	IVITY																															

## Category 6A

IAEBH6XS	IndustrialNet™ Variant 1 Bulkhead, Category 6A, Shielded Connector.	3	3	2	2							4	•	_	•	•	•		•	-20	•		•	С	С			•					•
IAEBH6X	IndustrialNet™ Variant 1 Bulkhead, Category 6A, UTP Connector.	3	3	2	1							•	•	-	•	•	•		•	-20	•		•	С	С			•				•	
AEBHC6XS	IndustrialNet™ Variant 1 Shielded Bulkhead Connector	3	3	2	1							•	•	-	•	•	•		•	-20	•		•	С	С			•				х	
CJSM6X88TG	Category 6A, RJ45, 8-position, 8-wire, marine universal module.	2	1	1	2	•	•	-	x	х	-							х			х		х	х	х	•							•
CJ6X88TG*	Category 6A, RJ45, 8-position, 8-wire, IP 40, universal module.	1	1	1	1	x	x	x	x	х	x							х		x	х	х	х	x	х							•	
ISPS6A88MFA	IndustrialNet <sup>™</sup> , Category 6A, Field Terminable, M12 X-Code Plug.	3	3	1	2							•	•	_	•	•	_		•	•							•	•	•	•	С		•
Category 6																																	
AEBH6S	IndustrialNet <sup>™</sup> Variant 1 Bulkhead, Category 6, Shielded Connector.	3	3	2	2							•	•	_	•	•	•		•	-20	•		•	С	С			•					•
IAEBH6	IndustrialNet <sup>™</sup> Variant 1 bulkhead, Category 6, UTP Connector.	3	3	2	1							•	•	-	•	•	•		•	-20	•		•	С	С			•				•	
IAEBHC6	IndustrialNet <sup>™</sup> , Category 6, UTP Coupler Connector.	3	3	2	1							•	•	-	•	•	•		•	-20	•		•	С	С			•				•	
Category 5e																																	
IAEBH5ES	IndustrialNet™ Variant 1 Bulkhead, Category 5e, Shielded Connector.	3	3	2	2							•	•	-	•	•	•		•	-20	•		•	С	С			•					•
IAEBH5E	IndustrialNet <sup>™</sup> Variant 1 Bulkhead, Category 5e, UTP Connector.	3	3	2	1							•	•	-	•	•	•		•	-20	•		•	С	С			•				•	
AEBHC5E	IndustrialNet™ Variant 1 Bulkhead, Category 5e, UTP Coupler Connector.	3	3	2	1							•	•	-	•	•	•		•	-20	•		•	С	С			•				•	
MPSI588T	Category 5e, 24 AWG, shielded modular plug with bulkhead.	3	3	2	2							•	•	_	•	•	•		•	-20	•		•	С	С			•					•
MPI588T	Category 5e, 24 AWG, shielded modular plug with bulkhead.	3	3	2	2							•	•	_	•	•	•		•	-20	•		•	С	С			•					•
ISPS5E44MFA	IndustrialNet <sup>™</sup> , Category 5e, M12 D-Code, Field Terminable Modular Plug.	3	3	1	2							•	•	-	•	•	-		•	•							•	•	•	•	С		•

<sup>\*</sup>Available in multiple colors. (continued)

																Deta	iled M	.I.C.E	. Rat	ting											
				C.E.					٨	/lech	anic	al				Ing	gress				C	lima	rtic/(	Chem	nical					EM	11
				Rating)				M <sub>2</sub>					M,			l <sub>2</sub>	l <sub>3</sub>			С	2					C <sub>3</sub>			E,	E <sub>2</sub>	E
LEGEND:  • = Acceptable for use in Environment  x = Not	NOTE: In the case a lower M.I.C.E. rated part is needed to be used in a higher M.I.C.E. rated environment please contact Tech Support for further guidance on the application.				100 ms-1	7mm/20ms-1	300N	1100N/150mm	100		250 ms-1	15mm/50 ms-1	2	2200N/150mm				-25°C to +70°C	1,0 °C/min	See C3	< 5,0 ppm			-40°C to +70°C	3,0 °C/min	1120 W/m <sup>2</sup>	< 500 ppm		Magnetic Field	Magnetic Field	DI Magnetic Field
Acceptable for use in Environment  - = Not Applicable  c = Contact Tech Support	*Tensile Connected: This aspect of environmental classification is installation specific and should be considered in association with IEC 61918 and the appropriate component specification. The 300 and 500 N numbers were used as a reference to differentiate the levels.	M	1	CE	shock	vibration	*Tensile Connected	compression	impact resistance	torsion	shock	vibration	*Tensile Connected	compression	torsion	IP 54/65	IP 67	operation temp.	temp. change			res. liquid chemicals	res. gaseous agents	operation temp.	temp. change	sun radiation	oil resistance	res. liquid chemicals res. gaseous agents		ESD, Transients, RF, Ma	Transionte DE
Part Number	Product Description																														
COPPER CONNEC	TIVITY (continued)																														
IAEBHUSBAA	IndustrialNet™ Variant 1 Bulkhead, USB 2.0 Female A to Female A Coupler Module.	3	3	2 2							•	•	-	•	•		•	-20	•		•	С	С			•				•	
M12 Adapters																															
ICAM12DRJS	IndustrialNet <sup>™</sup> , M12 D-Code Female to RJ45 Jack, Panel Mount Adapter.	1	1	1 2	•	•	-	x	х	_						х	х	•	•	х	•	С	С							•	
ICAM12XRJS	IndustrialNet <sup>™</sup> , M12 X-Code Female to RJ45 Jack, Panel Mount Adapter.	1	1	1 2	•	•	-	x	х	-						х	х	•	•	х	•	С	С							•	
ICAM12X90RJS	IndustrialNet <sup>™</sup> , M12 X-Code, Female to 90° RJ45 Jack, Panel Mount Adapter.	1	1	1 2	•	•	-	x	х	-						x	х	•	•	х	•	С	С							•	
Single Pair Etherne	et T1-L																														
SP-1LSA22BL	Single Pair Ethernet Shielded Plug Connector, Terminates 18 AWG 1-Pair Shielded Copper Cable; IP20 Performance.	-	-	_   -																											
SP-18SA42BL	IndustrialNet <sup>™</sup> , M8 Male, 4-Pin, A-Code, Field Terminable Single Pair Ethernet Connector.	-	-	_   -																											
COPPER PATCH C	ORDS																														
Category 6A																															
ISTPH6X1MTL	IndustrialNet <sup>™</sup> , Category 6A Shielded, 600 V, Patch Cord. Additional lengths available.	1	1	1 2	•	•	-	x	х	•						x		x	х	х	х	х	x							•	
UTP6AX***	Category 6A, UTP patch cord.	1	1	1 1	x	х	x	x	x	x						x		x	х	х	x	х	x						•		
IUTP6X**MBL	IndustrialNet <sup>™</sup> , Category 6A, UTP, Stranded Patch Cord, IP67 Industrial Bulkhead Modular Connectors with Caps.	3	3	2 1							•	•	-	•	•		•	-20	•		•	С	С			•			•		
Category 5e																															
ISTPHCH**TL	IndustrialNet <sup>™</sup> , Category 5e, Shielded, 600 V, Stranded Patch Cord.	1	1	1 2							•	•	_	•			•	-20	•		•	С	С			•				•	

<sup>\*</sup>Available in multiple colors.

<sup>\*\*</sup>Available in multiple lengths.

<sup>\*\*\*</sup>Available in multiple colors and lengths. \*\*\*\*Available in multiple colors and fiber counts.

<sup>^</sup>Available in multiple configurations and lengths.

																D	etaile	ed M.	I.C.E.	Rati	ng											
			M.I.	C E					M	lecha	anic	al					Ingr	ess				С	limat	ic/C	hem	ical					EM	
				C.E. Rating)			N	<b>1</b> 12					M	١			l <sub>2</sub>				C,						C,			E,	E <sub>2</sub>	
LEGEND:  • = Acceptable for use in Environment  x = Not Acceptable	NOTE: In the case a lower M.I.C.E. rated part is needed to be used in a higher M.I.C.E. rated environment please contact Tech Support for further guidance on the application.				100 ms-1	7mm/20ms-1		1100N/150mm	107		250 ms-1	15mm/50 ms-1		0N/150mm	307		-2	-3	-25°C to +70°C	1,0 °C/min		< 5,0 ppm			-40°C to +70°C	3,0 °C/min		< 500 ppm				
for use in Environment  Not Applicable  c = Contact	*Tensile Connected: This aspect of environmental classification is installation specific and should be considered in association with IEC 61918 and the appropriate component specification. The 300 and 500 N numbers were used as a reference to differentiate the levels.	М	ı	C E	shock	vibration	*Tensile Connected	compression	impact resistance	torsion	shock	vibration	*Tensile Connected	compression	impact resistance	torsion	IP 54/65	IP 67	operation temp.	temp. change	sun radiation	oil resistance	res. liquid chemicals	s. gaseous agents	operation temp.	temp. change	sun radiation	oil resistance	res. liquid chemicals res. gaseous agents	ESD, Transients, RF, Magnetic Field	ESD, Transients, RF, Ma	
Tech Support					S.	Α̈́	*	8	.⊑	호	sh	ķ	*	8	.⊑ .	ᅙ	₾	₽	do	ţē	sn	ō	ě	res.	О	ţē	sn	ō	<u> </u>	SE	SE	SE
Part Number	Product Description																															
Fiber Distribution Ca																																
FSJD912	9µm OS2 12 Fibers, Indoor/Outdoor DDJ cable, Riser (OFNR-LS), LSZH.	3	1	3 3							•	•	•	•	•	•		•	-20	•		•	С	С								•
FOJDZ12	50µm OM4 12 Fibers, Indoor/Outdoor DDJ cable, Riser (OFNR-LS), LSZH.	3	1	3 3							•	•	•	•	•	•		•		•		•	С	С								•
Pre-Configured Micr	o Data Center																															
MDC79	Pre-configured micro data center, 42 RU, includes two side panels, network cabling, patch panels, cable management, grounding, and casters.		1	c 2	-	-	-	-	-	_							x		х	х	х	х	х	x							•	
MDC79D	Pre-configured micro data center, 42 RU, includes two side panels, network cabling, patch panels, cable management, grounding, casters, shock pallet and ramp.	-	1	c 2	-	-	-	-	_	_							х		х	х	x	х	х	х							•	
MDC82NN	NEMA Type 12, IP55, single hinge front door with windowed glass, single hinge rear door, solid side panel (2), 42 RU, network cabling, patch panels, cable management, grounding, and casters.  Color Light Gray.  Dimensions: 78.7" H × 27.6" W × 47.2" D (2000mm × 700mm × 1200mm).	1	2	1 2	×	×	-	_	х	_									x	x	x	x	X	x							•	
MDC82NL	NEMA Type 12, IP55, single hinge front door with windowed glass, single hinge rear door, solid side panel (1), side panel with cutout for 20k BTU AC (1), 42 RU, network cabling, patch panels, cable management, grounding, and casters.  Color Light Gray.  Dimensions: 78.7" H × 27.6" W × 47.2" D (2000mm × 700mm × 1200mm).	1	2	1 2	×	×	_	_	х	-							•		x	x	x	x	х	x							•	
	strial Distribution Frames																															
ZDF242430	Pre-configured industrial distribution frame enclosure, 12U, ready for two access or two distribution switches.	-	2	с –	-	-	-	-	-	-							•		х	•	•	•	•	•							-	
ZDF242430-6	Pre-configured industrial distribution frame enclosure, 12U, 316 stainless steel, ready for two access or two distribution switches.	_	2	с –	-	-	-	-	_	_							•		х	•	•	•	•	•							-	
ZDF48-RA	Pre-configured industrial distribution frame enclosure ready for two access and two distribution switches.	-	2	c –	-	-	-	-	-	-							•		х	•	•	•	•	•							-	
ZDF48-6RA	Pre-configured industrial distribution frame enclosure, 316 stainless steel, ready for two access and two distribution switches.	-	2	с –	-	-	-	-	-	-							•		х	•	•	•	•	•							-	
ZDF24-S25  *Available in multiple of	Universal distribution frame 12U for two industrial switches, fiber tray, (1) 48-port patch panel, (1) 4U DIN mount bracket, (1) Maintenance-free UPS, redundant supplies AC to DC, terminal blocks, wiring for 120 V AC input.		2	с –	-	-	-	-	-	-					and fib		•		x	•	•	•	•	•					length		-	

<sup>\*</sup>Available in multiple colors.

<sup>\*\*</sup>Available in multiple lengths. \*\*\*Availa

<sup>\*\*\*</sup>Available in multiple colors and lengths.

<sup>\*\*\*\*</sup>Available in multiple colors and fiber counts.

<sup>^</sup>Available in multiple configurations and lengths.

															Deta	iled M	.I.C	E. Ra	ting											
		N	I.I.C	F						Med	char	nical			Ing	gress					Clima	atic/(	Chen	nical					ΕN	ΛI
				ting	)			M <sub>2</sub>					M <sub>3</sub>			l <sub>3</sub>			(	C <sub>2</sub>					С	3		E	. E	<sub>2</sub> E <sub>3</sub>
LEGEND:  • = Acceptable for use in Environment  x = Not	NOTE: In the case a lower M.I.C.E. rated part is needed to be used in a higher M.I.C.E. rated environment please contact Tech Support for further guidance on the application.				700		7mm/20ms-1	300N		301		250 ms-1 15mm/50 ms-1	2 2200N/150mm	307			-25°C to +70°C	1,0 °C/min	See C3	< 5,0 ppm			-40°C to +70°C	3,0 °C/min	1120 W/m²	< 500 ppm		Magnetic Field		p p
Acceptable for use in Environment  Not Applicable  c = Contact Tech Support	*Tensile Connected: This aspect of environmental classification is installation specific and should be considered in association with IEC 61918 and the appropriate component specification. The 300 and 500 N numbers were used as a reference to differentiate the levels.	М	1	C		3100	vibration	* Iensile Connected	compression	Impact resistance	torsion	shock	*Tensile Connected	impact resistance torsion	IP 54/65	IP 67	operation temp.	temp. change	sun radiation	oil resistance	res. liquid chemicals	res. gaseous agents	operation temp.	temp. change	sun radiation	oil resistance	res. liquid chemicals	res. gaseous agents	ESD, Transients, RF, Ma	Transients, RF,
Part Number	Product Description																													
	strial Distribution Frames (continued)																													
ZDF48-S65	Universal distribution frame 26U for six industrial switches, fiber tray, (3) 48-port patch panels, (3) 4U DIN mount brackets, (3) Maintenance-free UPSs, redundant supplies AC to DC, terminal blocks, wiring for 120 V AC input.	_	2	с -	-	-   -	-   -	-   -		-   -	-				•		x	•	•	•	•	•							-	-
Network Zone Syste	m																													
	s - Category 6A Connectivity and Fiber Uplink Patch Core	ls and	Ada	pters	s																									
Z22C-SS	Pre-configured network zone system, 24" × 24", mild steel enclosure, for two industrial switches, includes (8) Category 6A STP copper patch cords and jacks, (2) MM LC fiber patch cords with (6) LC adapters, backplane and cable management.	_	2	c 2	2 -	-   -	-   -	-   -	-   -	-   -	-				•		x	•	•	•	•	•						•	•	
Z22U-S14S	Universal network zone system, 24" × 24", mild steel enclosure, for one industrial switch, includes (8) Category 6A STP copper patch cords and jacks, (2) MM LC fiber uplink patch cords with (6) adapters and redundant power supplies.	_	2	С 2	2 -	- -	-   -	-   -	-   -	-   -	-				•		x	•	•	•	•	•						•	•	
Z22U-S15S	Universal network zone system, 24" x 24", mild steel enclosure, for one industrial switch, includes (8) Category 6A STP copper patch cords and jacks, (2) MM LC fiber uplink patch cords with (6) adapters, redundant power supplies and maintenance-free UPS.	_	2	С 2	2 -	-   -	-   -	-   -	-   -	-   -	_				•		x	•	•	•	•	•						·	•	
24" × 24" Enclosures	s - Category 6 Connectivity and Fiber Uplink Patch Cords	and A	dap	ters																										
Z22C-S	Pre-Configured network zone system, 24" × 24", mild steel enclosure for two industrial switches, includes (8) Category 6 UTP copper patch cords and jacks, (2) MM LC fiber patch cords with (6) LC adapters, backplane and cable management.	_	2	c -	1 -	-   -	-   -	-   -	-   -	-   -	-				•		x	•	•	•	•	•						•	•	
Z22C-6	Pre-Configured network zone system, 24" x 24", 316 stainless steel enclosure, for two industrial switches, includes (8) Category 6 UTP copper patch cords and jacks, (2) MM LC fiber patch cords with (6) LC adapters, backplane and cable management.	_	2	c -	1 -	-   -	-   -	-   -	-   -	-   -	-				•		x	•	•	•	•	•						·	•	
Z22U-S14	Universal network zone system, 24" x 24", mild steel enclosure, for one industrial switch, includes (8) Category 6 UTP copper patch cords and jacks, (2) MM LC fiber uplink patch cords with (6) adapters and redundant power supplies.	_	2	c ·	1 -	-		-	-	-   -	-				•		x	•	•	•	•	•						•	•	
Z22U-S15	Universal network zone system, 24" x 24", mild steel enclosure, for one industrial switch, includes (8) Category 6 UTP copper patch cords and jacks, (2) MM LC fiber uplink patch cords with (6) adapters, redundant power supplies and maintenance-free UPS.	-	2			-   -	-   -	-   -	-   -	-   -	-				•		x	•	•	•	•	•					lengt	•		

<sup>\*</sup>Available in multiple colors.

<sup>\*\*</sup>Available in multiple lengths. \*\*\*Available in multiple colors and lengths. \*\*\*\*Available in multiple colors and fiber counts.

<sup>^</sup>Available in multiple configurations and lengths.

																Deta	ailed I	VI.I.	C.E. I	Rati	ng										
			M.I.	C E						Mec	hanid	cal				lr	gress				C	lima	tic/(	Chem	nica	ı				ЕМІ	
			nal l					N	12					M <sub>3</sub>		I,	<sub>2</sub> I <sub>3</sub>				C <sub>2</sub>					C,			E,	E <sub>2</sub>	E <sub>3</sub>
LEGEND:  • = Acceptable for use in Environment  x = Not Acceptable	NOTE: In the case a lower M.I.C.E. rated part is needed to be used in a higher M.I.C.E. rated environment please contact Tech Support for further guidance on the application.					100 ms-1	7mm/20ms-1	300N	1100N/150mm	100		250 ms-1	15mm/50 ms-1	2 2200N/150mm	307			0000	1.0 °C/min	5000		mdd o'c >		-40°C to +70°C	3,0 °C/min	1120 W/m²	< 500 ppm		RF, Magnetic Field	Magnetic Field	RF, Magnetic Field
for use in Environment  -= Not Applicable  c = Contact Tech Support	*Tensile Connected: This aspect of environmental classification is installation specific and should be considered in association with IEC 61918 and the appropriate component specification. The 300 and 500 N numbers were used as a reference to differentiate the levels.	М	1	С	E	shock	vibration	*Tensile Connected	compression	impact resistance	torsion	shock	vibration	*Iensile Connected	impact resistance	ID 54/65	IP 67		operation temp.	o coiteiber and	ii calanda	oli resistance	res. Ilquid cnemicals	res. gaseous agents operation temp.	temp. change	sun radiation	oil resistance	res. ilquid cnemicals res. gaseous agents	ESD, Transients, RF, Ma	ESD, Transients, RF, Ma	ESD, Transients, RF, Ma
Part Number	Product Description																														
Network Zone Syste	em (continued)																														
24" × 36" Enclosure	s – Category 6A Connectivity and Fiber Uplink Patch Cords and Ada	pter	s			_																									
Z23C-SS	Pre-configured network zone system, 24" × 36", mild steel enclosure, for two industrial switches, includes (16) Category 6A STP copper patch cords and jacks, (4) MM LC fiber patch cords with (6) LC adapters, backplane and cable management.	-	2	С	2	_	_	_	_	_	_							)	<b>(</b> •	,	•	•							•		
Z23U-S24S	Universal network zone system, 24" × 36", mild steel enclosure, for two industrial switches, includes (16) Category 6A STP copper patch cords and jacks, (4) MM LC fiber uplink patch cords with (6) adapters and redundant power supplies.	-	2	С	2	_	_	_	_	_	_							)	< •										•		
Z23U-S25S	Universal network zone system, 24" × 36", mild steel enclosure, for two industrial switches, includes (16) Category 6A STP copper patch cords and jacks, (4) MM LC fiber uplink patch cords with (6) adapters, redundant power supplies and (2) maintenance-free UPS.	-	2	С	2	_	_	_	_	_	_							)	( •										•		
24" × 36" Enclosures	s - Category 6 Connectivity and Fiber Uplink Patch Cords and Adapt	ers																													
Z23C-S	Pre-Configured network zone system, 24" × 36", mild steel enclosure, for two industrial switches, includes (16) Category 6 UTP copper patch cords and jacks, (4) MM LC fiber patch cords with (6) adapters, backplane and cable management.	-	2	С	1	_	_	_	_	_	-							)	<b>(</b> •	•	•								•		
Z23C-6	Pre-Configured network zone system, 24" × 36", 316 stainless steel enclosure, for two industrial switches, includes (16) Category 6 UTP copper patch cords and jacks, (4) MM LC fiber patch cords with (6) adapters, backplane and cable management.	-	2	С	1	_	_	_	_	_	_							)	( •										•		
Z23U-S24	Universal network zone system, 24" × 36", mild steel enclosure, for two industrial switches, includes (16) Category 6 UTP copper patch cords and jacks, (4) MM LC fiber uplink patch cords with (6) adapters and redundant power supplies.	-	2	С	1	_	_	_	_	_	_							)	<b>(</b> •		•								•		
Z23U-S25	Universal network zone system, 24" × 36", mild steel enclosure, for two industrial switches, includes (16) Category 6 UTP copper patch cords and jacks, (4) MM LC fiber uplink patch cords with (6) adapters, redundant power supplies and (2) maintenance-free UPS.	-	2	С	1	-	-	-	-	-	-					•		)	<b>(</b> •		•	•							•		
Wireless Access Poi	nt Enclosure																														
PZNWE12	Wireless enclosure designed for Power over Ethernet applications. Includes unshielded connectivity kit. External dimensions: 13.56" H $\times$ 13.47" W $\times$ 6.56" D. Internal dimensions: 11.70" H $\times$ 11.70" W $\times$ 6.29" D.	1	2	1	2	х	x	-	-	x	-							)	< x	. >	x x	×	( )	ξ						•	
PZNWE14	Wireless enclosure designed for traditional AC power applications. Includes unshielded connectivity kit. External dimensions: 15.50" H $\times$ 13.50" W $\times$ 6.25" D. Internal dimensions: 13.53" H $\times$ 11.55" W $\times$ 5.94" D	1	2	1	2	х	x	_	_	x	_							>	¢ χ	· >	x x	×	( )	C						•	

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		(F	ivi.i inal	.C.E. Rati		П		N	<b>/1</b> <sub>2</sub>					N	l <sub>3</sub>			l <sub>2</sub>				С	; <sub>2</sub>					С	; 3		E	<b>E</b> , <b>E</b> ,	<sub>2</sub> E <sub>3</sub>
LEGEND:  • = Acceptable for use in Environment  x = Not	NOTE: In the case a lower M.I.C.E. rated part is needed to be used in a higher M.I.C.E. rated environment please contact Tech Support for further guidance on the application.					100 ms-1	7mm/20ms-1	300N	1100N/150mm	100		250 ms-1	15mm/50 ms-1	2	2200N/150mm	307				-25°C to +70°C	1,0 °C/min	See C3	< 5,0 ppm			-40°C to +70°C	3,0 °C/min		< 500 ppm		Magnetic Field		
Acceptable for use in Environment  -= Not Applicable  c = Contact Tech Support	*Tensile Connected: This aspect of environmental classification is installation specific and should be considered in association with IEC 61918 and the appropriate component specification. The 300 and 500 N numbers were used as a reference to differentiate the levels.	М	1	С	E	shock	vibration	*Tensile Connected	compression	impact resistance	torsion	shock	vibration	*Tensile Connected	compression	impact resistance	torsion	IP 54/65	IP 67	operation temp.	temp. change	sun radiation	oil resistance	res. liquid chemicals	res. gaseous agents	operation temp.	temp. change	sun radiation	oil resistance	res. liquid chemicals		ב צ	Iransients, RF,
Part Number	Product Description																																
DIN Rail Mount Pate FDPPSIG	thing IndustrialNet™ DIN Rail Fiber Optic Patch Panel with GP21 cable entry gland, for use with FAPs.	1	-	1	3	-	х	-	x	x	-							-		x	х	х	х	x	х								•
FDPPEIG	IndustrialNet™ DIN Rail Fiber Optic Patch Panel with GP21 cable entry gland, for use with FAPs and OptiCom® Cassettes.	1	-	1	3	-	x	-	х	х	-							-		х	x	х	x	x	x								•
FDME8RG	IndustrialNet <sup>™</sup> , 8-Port, DIN Rail Fiber Optic Enclosure.	1	1	1	3	-	x	-	х	x	-							x		x	x	x	х	х	x								•
CADIN1IG	1-port DIN rail mount adapter with label.	-	-	1	1	x	x	-	x	x	-							-		x	x	х	x	x	x							x	
CADIN1IG-S	1-port, Shielded DIN rail mount adapter with label.	-	1	-	-	-	-	-	-	-	-							x		-	-	-	_	-	-							-	-
CDPP8RG	IndustrialNet™ 8-Port DIN Rail Mount Copper Patch Panel.	-	-	1	1	x	x	-	х	x	-							-		х	х	x	x	x	x							х	
CDPP8RG-S	IndustrialNet <sup>™</sup> Shielded 8-Port DIN Rail Mount Copper Patch Panel.	-	-	1	1	x	x	-	х	x	-							-		х	х	x	х	x	-							х	
Uninterruptible Pow																																	
UPS00100DC	Uninterruptible Power Supply (UPS), 100 Watts, 24-48 VDC in/out, DIN rail mount.	1	1	1	-	-	-	-	-	-	-							-		-	-	-	-	-	-							-	-
UPS003LSM	UPS load sense module.	1	1	1	-	-	-	-	-	-	-							-		-	-	-	-	-	-							-	
Faceplates																																	
IAEFP1	Vertical, stainless steel, single gang faceplate accepts one IndustrialNet™ Bulkhead Connector or Adapter.	_	3	-	-	-	-	-	-	-	-								•	-	-	-	-	-	-							-	
IAEFP2-2G	Vertical, stainless steel, double gang faceplate accepts two IndustrialNet™ Bulkhead Connectors or Adapters.	-	3	-	-	-	_	_	-	-	-								•	-	-	-	-	-	-							-	-
Zone Cabling Acces																																	
PZNDVK	Zone cabling drain and vent kit, NEMA 4× rating.	-	3	-	-	-	-	-	-	-	-								•	-	-	-	_	-	-							-	-

