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





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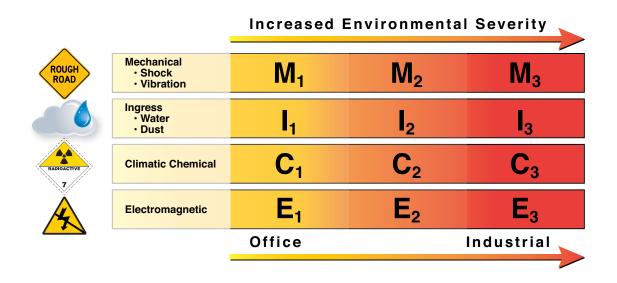
When designing the physical infrastructure to support network communications in a manufacturing location, TIA-1005-A is a standard that must be considered.

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/networkpartsamerica or the online catalog at 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.

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			M.I.	C E						M	echa	anica	ıl				Ing	ıress				C	imat	c/Ch	emic	al					ЕМІ	
				C.⊑. Ratin	g)			M	 ا ₂					M ₃			l ₂	l ₃			C,						C ₃			Ε,	E ₂	E ₃
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	107		250 ms-1	15mm/50 ms-1	2	2200N/150mm 30J				-25°C to +70°C	1,0 °C/min	See C3	< 5,0 ppm		J. 10- C + O + J. O - V -	3,0 °C/min	1120 W/m²	< 500 ppm			Magnetic Field		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.	M	I	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	operation temp	temp. change	sun radiation	oil resistance	res. liquid chemicals	res. gaseous agents	ESD, Transients, RF,	ESD, Transients, RF,	ESD, Transients, RF,
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	•		•					•	
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	•		•					•	
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	•		•					•	
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	•		•					•	
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	•		•					•	
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			•					•	
PUP6AV04*-G	Copper cable, Category 6A, 4-pair, 23 AWG stranded, UTP, CMP, 1,000 ft./305m reel.	1	-	1	1	x	-	х	x	x	х						-		х	х	х	х	x :	ĸ						•		
Category 6																																
ISX6004A*-LED	Copper cable, industrial, Category 6, 4-pair, 24/7 AWG stranded, S/FTP, PUR, 1640 ft./500m reel.	2	-	2	2	•	•	-	•	•	•						_			•		•	С	•		•					•	
IFRH6C04BL-UG	Copper cable, industrial, 600 V, Category 6, 4-pair, 23/1 AWG, F/UTP, CMR, Black, 1000 f.t/305m reel.	2	-	2	2	•	•	-	•	•	•						_		-20	•		•	С	0		•					•	
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	•		•					•	
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	9	,	•					•	
ISFX5502A*-LED	Copper cable, industrial, Category 5e, 2-pair, 24/7 AWG stranded, SF/UTP, PUR, 1640 ft./500m reel.	2	-	2	2	•	•	-	•	•	•						-			•		•	С			•					•	
IFRH5C02*-UG	Copper cable, industrial, 600 V, Category 5e, 2-pair, 24/1 AWG solid, F/UTP, CMR, 1000 ft./305m reel.	2	-	2	2	•	•	-	•	•	•						-		-20	•		•	С	0		•					•	
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	0		•					•	
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	0		•				•		

^{*}Available in multiple colors.

																	Det	ailed	М.І.С).E. F	Ratin	g									
			84.1	C.E.						M	echa	nica	ıl				lr	gres	s			C	lima	tic/C	hemi	cal				E	ΞМΙ
				C.⊑. Ratiı				M	12					M,	3			₂ l ₃			С	2					C ₃			E,	E ₂ E ₃
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		N/150mm	107		250 ms-1	15mm/50 ms-1	2	2200N/150mm	300			-25°C to +70°C	1,0 °C/min	See C3	< 5,0 ppm			-40°C to +70°C	3,0 C/IIIII			;	Magnetic Field	Magnetic Field 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.	M	I	С	E	shock	vibration	*Tensile Connected	compression	impact resistance	torsion	shock	vibration	*Tensile Connected	compression	Impact resistance	torsion	IP 54/65		temp. change	sun radiation	oil resistance	res. liquid chemicals	res. gaseous agents	operation temp.	sun radiation	oil resistance	res. liquid chemicals	res. gaseous agents	Transients,	ESD, Transients, RF, ESD, Transients, RF,
Part Number	Product Description																														
Copper Connectivity Category 6A	l																														
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		•				•	
IAEBHC6X	IndustrialNet™ Variant 1 UTP Bulkhead Connector.	3	3	2	1							•	•	-	•	•	•	•	-20	•		•	С	С		•				х	
IAEBHC6XS	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	•	•	-	х	x	-							ĸ		х		х	х	x	•						•
CJ6X88TG*	Category 6A, RJ45, 8-position, 8-wire, IP 40, universal module.	1	1	1	1	х	х	х	х	х	х							ĸ	х	х	х	x	х	x						•	
ISPS6A88MFA	IndustrialNet [™] , Category 6A, Field Terminable, M12 X-Code Plug.	3	3	1	2							•	•	-	•	•	-	•	•							• •	•	•	С		•
Category 6																															
IAEBH6S	IndustrialNet [™] Variant 1 Bulkhead, Category 6, Shielded Connector.	3	3	2	2							•	•	_	•	•	•	•	-20	•		•	С	С		•					•
IAEBH6	IndustrialNet [™] Variant 1 bulkhead, Category 6, UTP Connector.	3	3	2	1							•	•	-	•	•	•	٠	-20	•		•	С	С		•				•	
IAEBHC6	IndustrialNet [™] , Category 6, UTP Coupler Connector.	3	3	2	1							•	•	-	•	•	•	•	-20	•		•	С	С						•	
IAEBHUSBAA	IndustrialNet [™] Variant 1 Bulkhead, USB 2.0 Female A to Female A Coupler Module.	3	3	2	2							•	•	-	•	•	•	•	-20	•		•	С	С		•					•
Category 5e IAEBH5ES	IndustrialNet [™] Variant 1 Bulkhead, Category 5e, Shielded Connector.	3	3	2	2							•	•	_	•	•			-20	•		•	С	С			j				•
IAEBH5E	IndustrialNet™ Variant 1 Bulkhead, Category 5e, UTP Connector.	3	3	2	1									_	•	•						•		С						•	
IAEBHC5E	IndustrialNet™ Variant 1 Bulkhead, Category 5e, UTP Coupler Connector.	3	3	2	1							•		-					-20	•		•	С	С		٠.				•	
IAEBHC5ES	IndustrialNet™ Variant 1 Shielded Bulkhead Connector.	3	3	2	2							•	•	-	•	•			-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 [™] , Category 5e, M12 D-Code, Field Terminable Modular Plug.	3	3	1	2							•	•	-	•	• .	-	•	•								•	•	С		•

^{*}Available in multiple colors. (continued)

																D	etail	ed N	I.I.C.	E. R	atin	g									
			M.I.C							М	echa	nica					Ingi	ress				C	Clima	tic/C	Chen	nica				E	ЕМІ
			nal F		ıg)			M	 2					M ₃			l ₂	l ₃			C	2					C,	3		E,	E ₂ E ₃
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	10)		250 ms-1	15mm/50 ms-1	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/m ²	< 500 ppm		Magnetic Field	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.	M	1	С	E	shock	vibration	*Tensile Connected	compression	impact resistance	torsion	shock	*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	Transients,	ESD, Transients, RF, Magnetic Field ESD, Transients, RF, Magnetic Field
Part Number	Product Description																														
Copper Connectivity USB																															
IAPCMUSBAA*	Industrial Mini-Com® USB 2.0 Female A/Female A Coupler.	1	1	1	1	x	x	-	x	x	-						х		х	х	x	x	х	x						•	
M12 Adapters																															
ICAM12DRJS	IndustrialNet [™] , M12 D-Code Female to RJ45 Jack, Panel Mount Adapter.	1	1	1	2	•	•	-	x	х	-						х	x	•	•	х	•	С	С							•
ICAM12XRJS	IndustrialNet™, M12 X-Code Female to RJ45 Jack, Panel Mount Adapter.	1	1	1	2	•	•	-	x	х	-						х	x	•	•	х	•	С	С							•
ICAM12X90RJS	IndustrialNet [™] , M12 X-Code, Female to 90° RJ45 Jack, Panel Mount Adapter.	1	1	1	2	•	•	-	x	х	-						х	x	•	•	х	•	С	С							•
Copper Patch Cords Category 6A																															
ISTPH6X1TL	IndustrialNet [™] , Category 6A Shielded, 600 V, Patch Cord. Additional lengths available.	1	1	1	2	•	•	-	x	х	•						х		х	х	х	x	x	x							•
UTP6A***	Category 6A, UTP patch cord.	1	1	1	1	x	х	х	x	х	х						х		х	х	х	x	x	x						•	
ICX^	IndustrialNet [™] , Category 6A, Shielded, M12 X-Code, Overmolded Cordsets.	3	3	2	2							•	• -	- •	•	•		•		•		•	С	С	•		•				•
Category 5e																															
ISTPHCH**TL	IndustrialNet [™] , Category 5e, Shielded, 600 V, Stranded Patch Cord.	1	1	1	2							•	• -	- •	•	•		•	-20	•		•	С	С			•				•
IUTPCH**Y	IndustrialNet [™] , Category 5e, UTP, Stranded Patch Cord with Caps.	3	3	2	1							•	• -	_ •	•	•		•	-20	•		•	С	С			•			•	
ICD^^T1**	IndustrialNet [™] , Category 5e, Shielded, M12 D-Code, Overmolded Cordsets.	3	3	2	2							•	• -	_ •	•	•		•		•		•	С	С	•		•				•
ICD^^T2**	IndustrialNet [™] , Category 5e, UTP, M12 D-Code, Overmolded Cordsets.	3	2	2	1							•	•	•	•	•		•		•		•	С	С	•		•			•	

^{*}Available in multiple colors.

^{**}Available in multiple lengths.

^{***}Available in multiple colors and lengths.

^{****}Available in muliple colors and fiber counts.

[^]Available in multiple configurations and lengths.

																	Def	taile	I.M E	.C.E	. Ra	ting										
										N	/lech	anic	al				li	ngre	ss				Cli	ima	tic/C	nemio	cal					ЕМІ
		(F		I.C.E Rat)			M ₂					M	3			l ₂				C ₂						C ₃				E ₂
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	300N	1/150mm	101		250 ms-1	15mm/50 ms-1	2	0N/150mm	307			J°02' 04 J°36	0 0 1 1 0 0 7 1	1,0 °C/min		< 5,0 ppm			-40°C to +/0°C	2,0 M/m²		::		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	*Tensile Connected		impact resistance	torsion	shock	vibration	*Tensile Connected	compression	Impact resistance	TOTSIOT	IP 54/65	IF 0/	operation of the state of the s	0			res. Ilquid chemicals	res. gaseous agents	operation temp.	Single of the second se	oil resistance	res. liquid chemicals	res. gaseous agents	ESD, Transients, RF,	ESD, Transients, RF, Magnetic Field
Part Number	Product Description																															
Fiber Distribution FSJD912	9µm OS2 12 Fibers, Indoor/Outdoor DDJ cable, Riser (OFNR-LS), LSZH.	3	1	3	3	3						•	•	•	•	•			• -2	20	•		•	С	С							
FOJDZ12	50μm OM4 12 Fibers, Indoor/Outdoor DDJ cable, Riser (OFNR-LS), LSZH.	3	1	3	3	3							•	•	•	• (•			С	С							
Pre-Configured M																																
MDC79	Pre-configured micro data center, 42 RU, includes two side panels, network cabling, patch panels, cable management, grounding, and casters.	_	1	С	2	2 -	- -	- -	_	_	_							х)	(x >	x :	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	С	2	2 -	- -		_	-	-							x)	(x >	x :	х	x	x							•
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 x 27.6" W x 47.2" D (2000mm x 700mm x 1200mm).	1	2	1	2	2 :	x >	· —		x	_								>	()	x >	к :	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 x 27.6" W x 47.2" D (2000mm x 700mm x 1200mm).	1	2	1	2	2 :	x >	< _	_	x	_							•	>	C :	x >	x :	х	x	x							•
	ndustrial Distribution Frames																															
ZDF242430	Pre-configured industrial distribution frame enclosure, 12U, ready for two access or two distribution switches.	_	2	С	-		- -	- -	-	-	-							•	>	(•	•	•	•	•							-
ZDF242430-6	Pre-configured industrial distribution frame enclosure, 12U, 316 stainless steel, ready for two access or two distribution switches.	_	2	С	-		- -	- -	-	-	-								>				•		•							-
ZDF48-RA	Pre-configured industrial distribution frame enclosure ready for two access and two distribution switches.	-	2	С	†-		- -	- -	_	-	-							•	>	(•	•	•	•	•							-
ZDF48-6RA	Pre-configured industrial distribution frame enclosure, 316 stainless steel, ready for two access and two distribution switches.	-	2	С	-		- -	- -	-	-	-								>	(•	•	•	•							-
ZDF24-S25	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	-	-	-	-	_	-	-							•)	(•	•	•	•	•							-

^{*}Available in multiple colors.

^{**}Available in multiple lengths.

^{***}Available in multiple colors and lengths.

^{****}Available in muliple colors and fiber counts.

																D	etailed	M.I.C).E. I	Ratin	g										
				۰.						М	echa	ınica	ı				Ingres	s			C	lima	tic/C	hem	ical					EM	
		(F	™.ı inal	.C.E Rati				N	/ 1 ₂					M ₃			l ₂ l ₃			С	2					C,	3		E,	E ₂	E,
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	107		250 ms-1	15mm/50 ms-1	000N/150mm	307			-25°C to +70°C	1,0 °C/min		< 5,0 ppm			-40°C to +70°C	3,0 °C/min		< 500 ppm		Magnetic Field	Magnetic Field	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.	M	1	С	E	shock	vibration	ected	compression	impact resistance	torsion	shock	*Tensile Connected	refisite confineded	impact resistance	torsion	IP 54/65	operation temp.	temp. change			res. liquid chemicals	res. gaseous agents	operation temp.	temp. change	sun radiation	oil resistance	res. liquid chemicals	ESD, Transients, RF,	ESD, Transients, RF,	ESD, Transients, RF,
Part Number	Product Description																														
	ndustrial 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 Sy																															
24" x 24" Enclosu Z22C-SS	Ires – Category 6A Connectivity and Fiber Uplink Patch Cords and Adap Pre-configured network zone system, 24" x 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 adaptors, backplane and cable management.	otors –	2	С	2	-	_	_	-	_	-						•	x	•	•	•	•	•						•		
Z22U-S14S	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) adaptors and redundant power supplies.	-	2	С	2	-	_	-	_	_	-						•	х	•	•	•	•	•						•		
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) adaptors, redundant power supplies and maintenance-free UPS.	_	2	С	2	_	_	_	_	_	-						•	x	•	•	•	•	•						•		
24" x 24" Enclosu	ires – Category 6 Connectivity and Fiber Uplink Patch Cords and Adapto	ors																													
Z22C-S	Pre-Configured network zone system, 24" x 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 adaptors, backplane and cable management.	_	2	С	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 adaptors, backplane and cable management.	_	2	С	1	_	_	-	_	-	-						•	х	•	•	•	•	•						•		
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) adaptors and edundant power supplies.	_	2	С	1	-	-	-	_	-	-						•	х	•	•	•	•	•								
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) adaptors, redundant power supplies and maintenance-free UPS.	_	2	С	1	-	_	-	_	-	-						•	x	•	•	•	•									

(continued)

																Deta	iled	М.І.	C.E	. Rat	ing											
									N	lech	anic	al				Ing	gres	s				Clin	natic	:/Ch	emic	al					EMI	
		(Final	I.C.E Rat		Г			M ₂					М	3		l,	I,				C ₂			Г			C ₃			Ε,	E ₂	E ₃
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		1/150mm	107		250 ms-1	15mm/50 ms-1		0N/150mm	307			-25°C to +70°C	1.0 °C/min	See C3	E			-40°C to +70°C	3,0 °C/min	1120 W/m²				Magnetic Field	Field	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.	M I	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	res. gaseous agents	RF,	ESD, Transients, RF,	ESD, Transients, RF, Magnetic
Part Number	Product Description																															
Network Zone Syste	ะm (continued) s – Category 6A Connectivity and Fiber Uplink Patch Cords and A	dantor																														
Z23C-SS	Pre-configured network zone system, 24" x 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 adaptors, backplane and cable management.	_ 2		2	_		_	- -		_						•		x		•	•	•	•							•		
Z23U-S24S	Universal network zone system, 24" x 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) adaptors and redundant power supplies.	- 2	С	2	-	- =	-	- -		-						•		х	•	•	•	•	•							•		
Z23U-S25S	Universal network zone system, 24" x 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) adaptors, redundant power supplies and (2) maintenance-free UPS.	_ 2	С	2	-	- _	. _	- -	- _	_						•		x	•	•	•	•	•							•		
24" x 36" Enclosure	s - Category 6 Connectivity and Fiber Uplink Patch Cords and Ad	aptors																														
Z23C-S	Pre-Configured network zone system, 24" x 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) adaptors, backplane and cable management.	_ 2	С	1	-		_	- -	- _	-						•		x		•	•	•	•							•		
Z23C-6	Pre-Configured network zone system, 24" x 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) adaptors, backplane and cable management.	_ 2	С	1	-	. _	_	- -	- -	-						•		x	•	•	•	•	•							•		
Z23U-S24	Universal network zone system, 24" x 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) adaptors and redundant power supplies.	- 2	С	1	_	- -	. -	- -	- -	-						•		х	•	•	•	•	•							•		
Z23U-S25	Universal network zone system, 24" x 36", mild steel enclosure, for two industrial switches, includes (16) Catetory 6 UTP copper patch cords and jacks, (4) MM LC fiber uplink patch cords with (6) adaptors, redundant power supplies and (2) maintenance-free UPS.	- 2	С	1	_	_	_	-	- -	_						•		x	•	•	•	•	•							•		
Wireless Access Po																																
PZNWE12	Wireless enclosure designed for Power over Ethernet applications. Includes unshielded connectivity kit. External dimensions: 13.56" H x 13.47" W x 6.56" D. Internal dimensions: 11.70" H x 11.70" W x 6.29" D.	1 2	1	2	x	x	-	-	- x	-						•		x	×	х	x	х	x								•	
PZNWE14	Wireless enclosure designed for traditional AC power applications. Includes unshielded connectivity kit. External dimensions: 15.50" H x 13.50" W x 6.25" D. Internal dimensions: 13.53" H x 11.55" W x 5.94" D	1 2	1	2	x	х	-	-	- x	_						•		х		х	х	х	x								•	

															D	etail	ed N	I.I.C	E. R	atin	g									
		N/L	I.C.E						M	echa	anica	al				Ingr	ess				С	imat	c/Ch	emic	al				E	EMI
		(Fina			Г		N	M ₂					M,	3		l ₂	l ₃			С	2		Т			C ₃			E, !	E ₂ E
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	107		250 ms-1	15mm/50 ms-1	2	2200N/150mm 30J				-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 ²	< 500 ppm		i :	Magnetic Field	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.	M I	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	operation temp	temp. change	sun radiation	oil resistance	res. liquid chemicals	ants r	Transients, RF,	ESD, Transients, RF, Magnetic Field ESD, Transients, RF, Magnetic Field
Part Number	Product Description																													
DIN Rail Mount Patc																													_	
FDME8RG	IndustrialNet [™] , 8-port, DIN Rail Fiber Optic Enclosure.	1 1	1	3	-	х	_	х	х	-						х		x	x	x	х	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	х	-	х	х	_						_		х	х	x	х	x :	<							x
CDPP8RG-S	IndustrialNet [™] Shielded 8-Port DIN Rail Mount Copper Patch Panel.		. 1	1	x	х	-	х	х	_						_		х	x	x	x	х -	-							x
Uninterruptible Pow	er Supply																													
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	sories																													
PZNDVK	Zone cabling drain and vent kit, NEMA 4X rating.	_ 3	_	_	_	_	_	_	_	_							•	_	_	_	_	_ .	-							_

