PowerWise® 1G 4PPoE with FEP Jacket

CMP-LP Indoor/Outdoor













Specifications					
Pair Count	4 Solid annealed copper 22 (0.64) CMP:				
Conductor	FEP Pair 1: ColorTip Light Blue, Blue				
AWG (mm)	Pair 2: ColorTip Light Orange, Orange Pair 3: ColorTip Light Green, Green				
Insulation	Pair 4: ColorTip Light Brown, Brown				
	Coated copper				
Insulation Colors	Low Smoke FEP				
	100 ± 15				
Heat Dissipation Element	CMP: 74				
Jacket	UL 444				
Characteristic Impedance	NFPA 262 ANSI/TIA-568.2-D				
Ohms	RoHS-compliant/RoHS 2-compliant HDBaseT Class A and B				
Nominal Velocity of Propagation, %					
	UL Listed CMP-LP (0.6) c(UL) Listed CMP				
Performance Compliance	HDBaseT Class A and B				
	HPD Declare				
	RoHS-compliant/RoHS 2-compliant				

NRTL Programs

Sustainability

Environmental Specifications	
Operation	-40°C to +200°C
Storage/Shipping	-40°C to +200°C
Installation	-40°C to +200°C

Features (CONT.)

- Combined indoor/outdoor rating
- UV resistant
- CMP Listed and special jacket material

Benefits (CONT.)

- · Reduces inventory by eliminating multiple cable types
- Increase life in direct, long term
- Eliminates the need to transition to fire resistant cable and is ideal for slab application when installed

Product Description

PowerWise® 1G 4PPoE cables provide the best performance and overall value for 4 Pair Power over Ethernet (4PPoE) applications requiring up to 100W of power and up to 2.5GBASE-T Ethernet performance.

PowerWise® 1G 4PPoE cables are specifically designed with heat dissipation element to mitigate temperature build-up, offer exceptional energy efficiency and ensure performance (up to 2.5GBASE-T Ethernet) over the lifetime of your system. Cable temperature increases are reduced and power efficiency is increased as a result of 22 gauge conductors. Plenum rated conductors are also 100% FEP insulated and ensure cable performance over the life of your system.

Employing the latest polymer technology, FEP Jacketed Plenum is constructed entirely of chemical, oil, heat, and moisture resistant FEP fluoropolymer. It is ideally suited for industrial UTP applications where severe environmental stresses would compromise standard PVC plenum cables. Additionally, the cable is specially processed to ensure a more durable print legend.

PowerWise® 1G 4PPoE cables are the best solution to connect and power your 4PPoE applications compared to standard category cable designs. The Superior Essex PowerWise® 1G 4PPoE with FEP jacket CMP Indoor/ Outdoor cable is specifically designed for applications include Ethernet interconnect cable for Wi-Fi or retrofit cable installations that employ exterior runs having long-term outdoor exposure between two environmentally protected points. Indoor/Outdoor cables are designed to extend the run between the Network Interface Unit and the point of entry into the interior of a residence or a premise. In addition, the CMP listing allows the cable to be used in riser spaces per NFPA 262, eliminating the need to transition to fire resistant cable and is ideal for slab application when installed correctly.

Applications

- 10BASE-T through 2.5GBASE-T Ethernet
- Power over Ethernet (PoE) IEEE 802.3bt Type 1 to 4
- · ATM and token ring
- · HDBaseT Class A and B

Features

- Health Product Declaration™ (HPD™)
- · Guaranteed 0.3 dB headroom for IL, ACR and PSACR
- Tested 350 MHz
- Tested in most severe temperature conditions in bundle of 100 cables
 - CableID® alpha numeric code printed every 2 feet
- QuickCount® marking system in feet and meters
- ColorTip® circuit identification system
- Color coded box labels • HDBaseT Class A and B
- certified UL LP listed
- Temperature cabling rating: 200°C for CMP
- FEP Jacket
- · All fluoropolymer construction
- · Heat dissipation element
- Ideal for extended over 100m

Benefits

- Contributes toward 1 LEED credit under the Material and Resources credit (MRc)
- Performance assurance for exceptional overall channel performance
- Assures ample bandwidth Headroom
- AWG 22 insulated wire offers 88% power efficiency and lowest temperature increase inside a bundle, the best of its class
- · Allows both ends of a cable run to be easily identifiable without the need to separately label or tone the cable
- Provides remaining length of cable on reel
- Easily identifiable conductor mates even in lowlight environments
- . Easily identifies jacket colors
- Ideal for any A/V applications up to 100m
- Third-party assurance of product safety in highheat and high-power applications
- Temperature rating of the insulation AND of the jacket provide improved cable lifespan despite high-heat and high-power applications
- · Lower smoke emission in plenum test than PVC
- · Resistant to chemical, moisture, thermal exposure
- · Mitigate the heat to same level along the whole distance of the link for improved bandwidth performances
- · Guaranteed distance for different applications based on BER test performed by UL at UL

Part Numbers and Physical Characteristics									
Listing	Part Number¹	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Package	Packages per Pallet				
CMP	PW52-H72-xP	0.22 (5.6)	37 (55)	1,000 ft Plywood Reel	20				
CMP	PW52-H46-xP	0.22 (5.6)	37 (55)	1.000 ft Brake Box®	12				

Jacket Colors								
¹Replace "x" with:	Blue = 2	Gray = 3	White = 4	Green = 5	Yellow = 6	Purple = 7	Red = 9	Black = E



CAUTIONARY INFORMATION

- Do not use as a substitute for Outside Plant (OSP) cables or direct burial.
- Technical Guideline TG114 "Installation of CMP/CMX & CMP/Indoor Outdoor Rated Cables in Conduit" must be followed to keep water out of cable ends to ensure warranty compliance. Refer to the "Resources" section on our site for the Technical Guideline "Installation of CMP/CMX & CMP/Indoor Outdoor Rated Cables in Conduit" for more information.
- For distance and warranty information please refer to TG115 PowerWise® Extended Distance Frequently Asked Questions.

Electrical S	pecifications	;								
	Insertion Loss @ 20°C Maximum dB/100 m		NEXT Minimum dB/100 m		ACR Minimum dB/100 m			PSNEXT Minimum dB/100 m		
Frequency	TIA-568.2-D	Superior Essex		TIA-568.2-D	Superior Essex	TIA-568.2-D	TIA-568.2-D Superior Essex		TIA-568.2-D Superior Essex	
MHz	Specified	Guaranteed	Typical	Specified	Typical	Calculated	Guaranteed	Typical	Specified	Typical
1	2	1.7	1.7	65.3	76.8	63.3	63.6	81.0	62.3	75.3
4	4.1	3.8	3.7	56.3	67.8	52.2	52.5	70.1	53.3	66.3
8	5.8	5.5	5.4	51.8	63.3	46.0	46.3	63.9	48.8	61.8
10	6.5	6.2	6.0	50.3	61.8	43.8	44.1	61.8	47.3	60.3
16	8.2	7.9	7.7	47.2	58.7	39.0	39.3	57.0	44.3	57.2
20	9.3	9.0	8.6	45.8	57.3	36.5	36.8	54.7	42.8	55.8
25	10.4	10.1	9.6	44.3	55.8	33.9	34.2	52.2	41.3	54.3
31.25	11.7	11.4	10.8	42.9	54.4	31.2	31.5	49.6	39.9	52.9
62.5	17	16.7	15.5	38.4	49.9	21.4	21.7	40.4	35.4	48.4
100	22	21.7	19.8	35.3	46.8	13.3	13.6	33.0	32.3	45.3
155			24.8		43.9			25.1		42.4
200			28.2		42.3			20.1		40.8
250			31.8		40.8			15.0		39.3
300			35		39.6			10.6		38.1
350			38.3		38.6			6.3		37.1

	PSACR Minimum dB/100 m				ss Minimum 100 m	ELFEXT Minimum dB/100 m		PSELFEXT Minimum dB/100 m	
Frequency MHz	TIA-568.2-D Superior Essex			TIA-568.2-D	Superior Essex	TIA-568.2-D Superior Essex		TIA-568.2-D Superior Essex	
	Calculated	Guaranteed	Typical	Specified	Typical	Specified	Typical	Specified	Typical
1	60.3	60.6	78.3	20.0	33.0	63.8	74.6	60.8	69.3
4	49.2	49.5	67.4	23.0	36.0	51.8	62.6	48.8	57.3
8	43.0	43.3	61.2	24.5	37.5	45.7	56.5	42.7	51.2
10	40.8	41.1	59.1	25.0	38.0	43.8	54.6	40.8	49.3
16	36.1	36.4	54.3	25.0	38.0	39.7	50.5	36.7	45.2
20	33.5	33.8	52.0	25.0	38.0	37.8	48.6	34.8	43.3
25	30.9	31.2	49.5	24.3	37.3	35.8	46.6	32.8	41.3
31.25	28.2	28.5	46.9	23.6	36.6	33.9	44.7	30.9	39.4
62.5	18.4	18.7	37.7	21.5	34.5	27.9	38.7	24.9	33.4
100	10.3	10.6	30.3	20.1	33.1	23.8	34.6	20.8	29.3
155			22.4		31.8		30.8		25.5
200			17.4		31.0		28.6		23.3
250			12.3		30.3		26.6		21.3
300			7.9		29.8		25.1		19.8
350			3.6		29.3		23.7		18.4