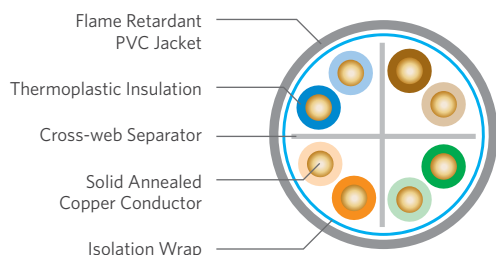


PowerWise® 10G 4PPoE

CMP-LP



SPECIFICATIONS

Pair Count	4
Conductor	Solid annealed copper
AWG (mm)	22 (0.64)
Insulation	FEP
Insulation Colors	Pair 1: ColorTip Light Blue, Blue Pair 2: ColorTip Light Orange, Orange Pair 3: ColorTip Light Green, Green Pair 4: ColorTip Light Brown, Brown
Jacket	FR, low smoke PVC
Characteristic Impedance Ohms	100 ± 15
Nominal Velocity of Propagation %	68
Performance Compliance	UL 444 CSA C22.2 No. 214-08 NFPA 262 ANSI/TIA-568-C.2 ANSI/ICEA S-90-661-2012 Article 800, NEC (NFPA 70)
NRTL Programs	UL Verified CAT 6A UL listed CMP-LP (0.7) c(UL) CMP c(UL) listed CMR UL Listed CMP-LP (0.6) c(UL) Listed CMP HDBaseT Certified

PRODUCT DESCRIPTION

PowerWise® 10G 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 10 Gigabit Ethernet performance. PowerWise 10G 4PPoE cables are specifically designed to mitigate temperature build up, offer exceptional energy efficiency and ensure performance (up to 10 Gigabit Ethernet) over the lifetime of your system.

PowerWise 10G 4PPoE cable provides the performance benefits of a typical CAT6A cable without a continuous shield to offer 7 dB margin over Alien Crosstalk (AXT) performance requirements in ANSI/TIA-568-C.2. Its uniquely designed Isolation Wrap contains discontinuous sections of metallized material, held in place by a polymeric layer. 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. PowerWise 10G 4PPoE cables are the best solution to connect and power your 4PPoE applications compared to standard CAT 6A designs.

APPLICATIONS

- 10BASE-T through 10GBASE-T Ethernet
- Power over Ethernet (PoE) - IEEE 802.3af
- PoE+ - IEEE 802.3at Type 1 and 2
- 4PPoE - IEEE 802.3bt Type 3 and 4 draft D1.2
- ATM and token ring
- Backward compatible to legacy protocols and applications

FEATURES

- Non-conductive Isolation Wrap
- Tested to 650 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
- UL LP listed
- Temperature cable rating: 90°C for CM

BENEFITS

- 7 dB AXT performance without grounding or bonding
- 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 low-light environments
- Easily identifies jacket colors
- Third-party assurance of product safety in high-heat and high-power applications
- Temperature rating of the insulation AND of the jacket provide improved cable lifespan despite high-heat and high-power applications

PART NUMBERS AND PHYSICAL CHARACTERISTICS

Listing	Part Number ¹	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Package	Packages per Pallet
CMP-LP	PW6H-H72-xB	0.30 (7.6)	48 (72)	1,000 ft Reel	12

JACKET COLORS

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

ELECTRICAL SPECIFICATIONS

Frequency MHz	Insertion Loss @ 20°C Maximum dB/100 m		NEXT Minimum dB/100 m		ACR Minimum dB/100 m		PSNEXT Minimum dB/100 m		PSACR Minimum dB/100 m	
	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical
1	2.1	2.0	74.3	78.3	72.2	77.3	72.3	77.3	70.2	76.3
4	3.8	3.7	65.3	69.3	61.5	66.6	63.3	68.3	59.5	65.6
8	5.3	5.1	60.8	64.8	55.4	60.6	58.8	63.8	53.4	59.6
10	5.9	5.7	59.3	63.3	53.4	58.6	57.3	62.3	51.4	57.6
16	7.5	7.3	56.2	60.2	48.8	54.0	54.2	59.2	46.8	53.0
20	8.4	8.1	54.8	58.8	46.4	51.7	52.8	57.8	44.4	51.2
25	9.4	9.1	53.3	57.3	44.0	49.7	51.3	56.3	42.0	49.0
31.25	10.5	10.2	51.9	55.9	41.4	47.2	49.9	54.9	39.4	46.7
62.5	15.0	14.4	47.4	51.4	32.4	39.0	45.4	50.4	30.4	38.4
100	19.1	18.4	44.3	48.3	25.2	32.4	42.3	47.3	23.2	31.7
200	27.6	26.5	39.8	43.8	12.2	20.1	37.8	42.8	10.2	19.5
250	31.1	29.8	38.3	42.3	7.3	15.5	36.3	41.3	5.3	15.1
300	34.3	32.9	37.1	41.1	2.9	11.4	35.1	40.1	0.9	10.8
400	40.1	38.3	35.3	39.3		4.6	33.3	38.3		3.6
500	45.3	43.0	33.8	37.8			31.8	36.8		
600		47.5		36.4				35.6		
650		49.7		35.9				35.1		
700		51.4		35.5				34.6		
750		53.3		35.1				34.2		

Frequency MHz	Return Loss Minimum dB/100 m		ACRF Minimum dB/100 m		PSACRF Minimum dB/100 m		PSANEXT Minimum dB/100 m		PSAACRF Minimum dB/100 m	
	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical
1	20.0	22.0	67.8	73.8	64.8	70.8	74.0	96.5	74.0	80.0
4	23.0	25.0	55.8	61.8	52.8	58.8	74.0	87.5	73.2	79.2
8	24.5	26.5	49.7	55.7	46.7	52.7	74.0	83.0	67.1	73.1
10	25.0	27.0	47.8	53.8	44.8	50.8	74.0	81.5	65.2	71.2
16	25.0	27.0	43.7	49.7	40.7	46.7	74.0	80.0	61.1	67.1
20	25.0	27.0	41.8	47.8	38.8	44.8	74.0	80.0	59.2	65.2
25	24.3	26.3	39.8	45.8	36.8	42.8	74.0	80.0	57.2	63.2
31.25	23.6	25.6	37.9	43.9	34.9	40.9	74.0	80.0	55.3	61.3
62.5	21.5	23.5	31.9	37.9	28.9	34.9	72.6	78.6	49.3	55.3
100	20.1	22.1	27.8	33.8	24.8	30.8	69.5	75.5	45.2	51.2
200	18.0	20.0	21.8	27.8	18.8	24.8	65.0	71.0	39.2	45.2
250	17.3	19.3	19.8	25.8	16.8	22.8	63.5	69.5	37.2	43.2
300	16.8	18.8	18.3	24.3	15.3	21.3	62.3	68.3	35.7	41.7
400	15.9	17.9	15.8	21.8	12.8	18.8	60.5	66.5	34.2	39.2
500	15.2	17.2	13.8	19.8	10.8	16.8	59.0	65.0	31.2	37.2
600		16.7		18.2		15.2		63.8		35.6
650		16.4		17.5		14.5		63.3		34.9
700		16.2		16.9		13.9				
750		16.0		16.3		13.3				

SUSTAINABILITY LEADERSHIP



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