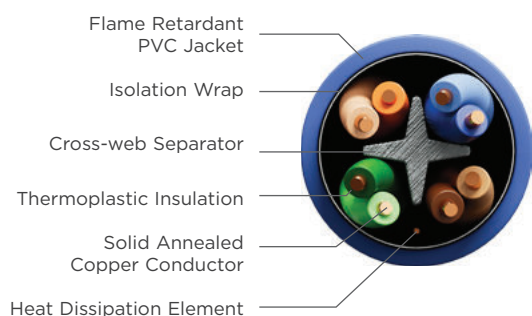


PowerWise® 10G 4PPoE

CMR-LP/CMP-LP



4PPoE



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
Heat Dissipation Element	Coated Copper
Jacket	FR, low smoke PVC
Characteristic Impedance Ohms	100 ± 15
Nominal Velocity of Propagation, %	67
Performance Compliance	UL 444 CSA C22.2 No. 214-08 NFPA 262 ANSI/TIA-568.2-D ANSI/ICEA S-90-661-2012 Article 800, NEC (NFPA 70) RoHS-compliant/RoHS 2-compliant
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 Class A and B
Sustainability	HPD RoHS-compliant/RoHS 2-compliant

CAUTIONARY INFORMATION



- For distance and warranty information please refer to TG115 PowerWise® Extended Distance Frequently Asked Questions.

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 shielded CAT6A cable while utilizing a proprietary isolation wrap which fully complies with UL444 requirements for an unshielded twisted pair (UTP) product and which assures 7dB margin over Alien Crosstalk (AXT) performance requirements in ANSI/TIA-568.2-D. 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 802.3bt Type 1 to 4
- ATM and token ring
- Backward compatible to legacy protocols and applications
- HDBaseT Class A and B

FEATURES

- Health Product Declaration™ (HPD™)
- Proprietary 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

BENEFITS

- Contributes toward 1 LEED credit under the Material and Resources credit (MRC)
- 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
- 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 facility

PART NUMBERS AND PHYSICAL CHARACTERISTICS

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

CMP-LP	PW6H-H72-xB	0.30 (7.6)	48 (72)	1,000 ft Reel	12
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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		

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

SUSTAINABILITY LEADERSHIP



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