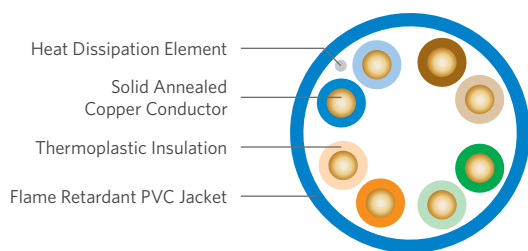


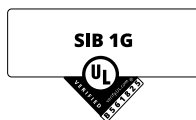
# PowerWise® 1G 4PPoE

CMR-LP/CMP-LP



## 4PPoE

## HDBT™



### SPECIFICATIONS

Pair Count	4
Conductor	Solid annealed copper
AWG (mm)	22 (0.64)
Insulation	CMR: Polyolefin CMP: 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	CMR: Flame retardant (FR) PVC CMP: FR, low smoke PVC
Characteristic Impedance Ohms	100 ± 15
Nominal Velocity of Propagation %	CMR: 71 CMP: 74
Performance Compliance	UL 444 CSA C22.2 No. 214-08 UL 1666 NFPA 262 ANSI/TIA-568.2-D ANSI/ICEA S-90-661-2012 Article 800, NEC (NFPA 70) HDBaseT Class A and B
NRTL Programs	UL listed CMR-LP (0.5) c(UL) listed CMR UL Listed CMP-LP (0.6) c(UL) Listed CMP HDBaseT Certified
Sustainability	UL Certified EPD HPD USGBC® Member RoHS-compliant/RoHS 2-compliant REACH-compliant



### CAUTIONARY INFORMATION

- For distance and warranty information please refer to warranty and tech guide documents

### 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 1 Gigabit Ethernet performance. PowerWise 1G 4PPoE cables are specifically designed to mitigate temperature build-up offer exceptional energy efficiency and ensure performance (up to 1 Gigabit Ethernet) over the lifetime of your system. Cable temperature increases are reduced and power efficiency is increased as a result of 22 gauge conductors and the heat dissipation element.

PowerWise 1G 4PPoE cable provides the performance benefits with a small diameter. Plenum rated conductors are also 100% FEP insulated and ensure cable performance over the life of your system. PowerWise 1G 4PPoE cables are the best solution to connect and power your 4PPoE and extended distance applications compared to standard category cable designs.

### APPLICATIONS

- 10BASE-T through 1000BASE-T Ethernet
- Power over Ethernet (PoE) - IEEE 802.3bt Type 1 to 4
- ATM and token ring
- HDBaseT Class A and B

### FEATURES

- UL Certified Environmental Product Declaration (EPD)
- 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 cable rating: 75°C for CMR and 90°C for CMP
- Heat dissipation element
- Ideal for extended distance over 100m

### BENEFITS

- Contributes toward 1 LEED credit under the Material and Resources credit (MRc)
- Contributes toward 1 LEED credit under the 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 low-light environments
- Easily identifies jacket colors
- Ideal for any A/V applications up to 100m channel
- 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 <sup>1</sup>	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Package	Packages per Pallet
CMR	PW52-H46-x5	0.23 (5.8)	28 (42)	1,000 ft BrakeBox®	12
CMR	PW52-H72-x5	0.23 (5.8)	28 (42)	1,000 ft Plywood Reel	16
CMP	PW52-H46-x8	0.23 (5.8)	37 (55)	1,000 ft BrakeBox	12
CMP	PW52-H72-x8	0.23 (5.8)	37 (55)	1,000 ft Plywood Reel	16

**JACKET COLORS**

<sup>1</sup>Replace "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	
	TIA-568.2-D	Superior Essex		TIA-568.2-D	Superior Essex	TIA-568.2-D	Superior Essex		TIA-568.2-D	Superior Essex
	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

Frequency MHz	PSACR Minimum dB/100 m			Return Loss Minimum dB/100 m		ELFEXT Minimum dB/100 m		PSELFEXT Minimum dB/100 m	
	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

**SUSTAINABILITY LEADERSHIP**



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