

DataGain® Category 6+ CMR/CMP



Product Description

DataGain cable provides the best value in Category 6 cables on the market today. The innovative design, which does not utilize a cross web filler, yields exceptional performance that exceeds TIA/EIA Category 6 specifications. DataGain easily surpasses the performance of other cost-competitive Category 6 cables.

Features

- Guaranteed NEXT, PS NEXT, ELFEXT, PS ELFEXT, ACR, PS ACR, and RL values greater than Category 6 requirements
- Guaranteed ACR of 27.6 dB at 100 MHz and 8.7 dB at 250 MHz
- QuickCount® marking system
- Color coded box labels
- Round Design with flexible tape separator
- Warranted with numerous connectivity manufacturers
- ColorTip™ Circuit Identification System
- BrakeBox™ payout control system

Benefits

- Greater assurance of exceptional overall channel performance at a great value
- “Future-proofing” the cable installation
- Eliminates guess work of footage in box or reel
- Easily identifiable jacket colors
- Reduces installation time
- Offers flexibility in selection of connectivity solutions
- Easily identifiable conductor mates even in low light environments
- Adjustable tension control on reel prevents overspin and entangling of cable.

Applications

- 10BASE-T through 1000BASE-T Ethernet, ATM and Token Ring

Part Numbers and Physical Characteristics

	Part #	Pair Count	AWG (mm)	Jacket Color	Nom. Dia. inches (mm)	Approx. Weight lbs/kft (kg/km)	Package
CMR	66-246-2A	4	23 (0.57)	Blue	0.22 (5.6)	24 (36)	1000' BrakeBox*
	66-246-3A	4	23 (0.57)	Gray	0.22 (5.6)	24 (36)	1000' BrakeBox*
	66-246-4A	4	23 (0.57)	White	0.22 (5.6)	24 (36)	1000' BrakeBox*
	66-246-6A	4	23 (0.57)	Yellow	0.22 (5.6)	24 (36)	1000' BrakeBox*
	66-246-5A	4	23 (0.57)	Green	0.22 (5.6)	24 (36)	1000' BrakeBox*
	66-246-7A	4	23 (0.57)	Purple	0.22 (5.6)	24 (36)	1000' BrakeBox*
	66-246-DA	4	23 (0.57)	Orange	0.22 (5.6)	24 (36)	1000' BrakeBox*
	66-272-2A	4	23 (0.57)	Blue	0.22 (5.6)	24 (36)	1000' Reel
	66-272-3A	4	23 (0.57)	Gray	0.22 (5.6)	24 (36)	1000' Reel
	66-272-4A	4	23 (0.57)	White	0.22 (5.6)	24 (36)	1000' Reel
	66-272-6A	4	23 (0.57)	Yellow	0.22 (5.6)	24 (36)	1000' Reel
	66-272-5A	4	23 (0.57)	Green	0.22 (5.6)	24 (36)	1000' Reel
	66-272-7A	4	23 (0.57)	Purple	0.22 (5.6)	24 (36)	1000' Reel
	66-240-2A	4	23 (0.57)	Blue	0.22 (5.6)	24 (36)	1000' POP™ Box
	66-240-3A	4	23 (0.57)	Gray	0.22 (5.6)	24 (36)	1000' POP™ Box
	66-240-4A	4	23 (0.57)	White	0.22 (5.6)	24 (36)	1000' POP™ Box
	66-240-5A	4	23 (0.57)	Green	0.22 (5.6)	24 (36)	1000' POP™ Box
	66-240-6A	4	23 (0.57)	Yellow	0.22 (5.6)	24 (36)	1000' POP™ Box
66-240-7A	4	23 (0.57)	Purple	0.22 (5.6)	24 (36)	1000' POP™ Box	
66-240-DA	4	23 (0.57)	Orange	0.22 (5.6)	24 (36)	1000' POP™ Box	
CMP	66-246-2B	4	23 (0.57)	Blue	0.20 (5.1)	25 (37)	1000' BrakeBox*
	66-246-3B	4	23 (0.57)	Gray	0.20 (5.1)	25 (37)	1000' BrakeBox*
	66-246-4B	4	23 (0.57)	White	0.20 (5.1)	25 (37)	1000' BrakeBox*
	66-246-6B	4	23 (0.57)	Yellow	0.20 (5.1)	25 (37)	1000' BrakeBox*
	66-246-5B	4	23 (0.57)	Green	0.20 (5.1)	25 (37)	1000' BrakeBox*
	66-246-7B	4	23 (0.57)	Purple	0.20 (5.1)	25 (37)	1000' BrakeBox*
	66-246-DB	4	23 (0.57)	Orange	0.20 (5.1)	25 (37)	1000' BrakeBox*
	66-272-2B	4	23 (0.57)	Blue	0.20 (5.1)	25 (37)	1000' Reel
	66-272-3B	4	23 (0.57)	Gray	0.20 (5.1)	25 (37)	1000' Reel
	66-272-4B	4	23 (0.57)	White	0.20 (5.1)	25 (37)	1000' Reel
	66-272-6B	4	23 (0.57)	Yellow	0.20 (5.1)	25 (37)	1000' Reel
	66-272-5B	4	23 (0.57)	Green	0.20 (5.1)	25 (37)	1000' Reel
	66-272-7B	4	23 (0.57)	Purple	0.20 (5.1)	25 (37)	1000' Reel
	66-240-2B	4	23 (0.57)	Blue	0.20 (5.1)	25 (37)	1000' POP™ Box
	66-240-3B	4	23 (0.57)	Gray	0.20 (5.1)	25 (37)	1000' POP™ Box
	66-240-4B	4	23 (0.57)	White	0.20 (5.1)	25 (37)	1000' POP™ Box
	66-240-5B	4	23 (0.57)	Green	0.20 (5.1)	25 (37)	1000' POP™ Box
	66-240-6B	4	23 (0.57)	Yellow	0.20 (5.1)	25 (37)	1000' POP™ Box
66-240-7B	4	23 (0.57)	Purple	0.20 (5.1)	25 (37)	1000' POP™ Box	
66-240-DB	4	23 (0.57)	Orange	0.20 (5.1)	25 (37)	1000' POP™ Box	

Other colors available: Orange, Red, Pink

* Reel-in-a-box with Dual Brake System, see page 236 for details.

Product Description CMR

• Conductor: 23 AWG (0.57 mm) Solid Annealed Bare Copper • Insulation: Thermoplastic • Tape Separator • Jacket: Flame Retardant PVC (Polyvinyl Chloride)

Product Description CMP

• Conductor: 23 AWG (0.57 mm) Solid Annealed Bare Copper • Insulation: FEP • Tape Separator • Jacket: Flame Retardant, Low Smoke PVC (Polyvinyl Chloride)

Electrical												
Frequency MHz	Attenuation (dB/100m) @ 20°C Maximum			NEXT (dB/100m) Minimum			ACR (dB/100m) Minimum			PS-NEXT (dB/100m) Minimum		
	TIA 568-B.2-1	Superior Essex		TIA 568-B.2-1	Superior Essex		TIA 568-B.2-1	Superior Essex		TIA 568-B.2-1	Superior Essex	
	Specified	Guaranteed	Typical	Specified	Guaranteed	Typical	Calculated	Guaranteed	Typical	Specified	Guaranteed	Typical
1	2.0	2.0	1.7	74.3	77.3	87.6	72.3	75.3	85.9	72.3	75.3	85.2
4	3.8	3.8	3.4	65.3	68.3	77.9	61.5	64.5	74.5	63.3	66.3	75.6
10	6.0	5.9	5.4	59.3	62.3	71.4	53.3	56.4	66.0	57.3	60.3	69.1
16	7.6	7.5	6.9	56.3	59.2	68.4	48.6	51.7	61.5	54.2	57.2	66.1
20	8.5	8.4	7.8	54.8	57.8	67.1	46.3	49.4	59.4	52.8	55.8	64.8
25	9.5	9.4	8.7	53.3	56.3	65.4	43.8	46.9	56.7	51.3	54.3	63.1
31.25	10.7	10.6	9.8	51.9	54.9	64.2	41.2	44.3	54.3	49.9	52.9	61.8
62.5	15.4	15.3	14.1	47.4	50.4	59.5	32.0	35.1	45.4	45.4	48.4	57.3
100	19.8	19.7	18.1	44.3	47.3	56.7	24.5	27.6	38.5	42.3	45.3	54.3
200	29.0	28.8	26.4	39.8	42.8	51.5	10.8	14.0	25.3	37.8	40.8	49.3
250	32.8	32.6	29.8	38.3	41.3	50.5	5.5	8.7	20.5	36.3	39.3	47.8
300		36.2	33.0		37.1	48.2		0.7	15.2		35.1	45.7
400		42.7	38.9		35.3	45.2			6.2		33.3	42.6
500			44.2			42.4						40.0
550			47.2			41.0						39.1
Frequency MHz	PS-ACR (dB/100m) Minimum			Return Loss (dB/100m) Minimum			ELFEXT (dB/100m) Minimum			PS-ELFEXT (dB/100m) Minimum		
	TIA 568-B.2-1	Superior Essex		TIA 568-B.2-1	Superior Essex		TIA 568-B.2-1	Superior Essex		TIA 568-B.2-1	Superior Essex	
	Calculated	Guaranteed	Typical	Specified	Guaranteed	Typical	Calculated	Guaranteed	Typical	Specified	Guaranteed	Typical
1	70.3	73.3	83.6	20.0	20.2	27.5	67.8	70.7	80.6	64.8	68.3	78.6
4	59.5	62.5	72.3	23.0	23.2	32.8	55.8	58.7	68.7	52.8	56.3	66.8
10	51.3	54.5	63.7	25.0	25.5	35.1	47.8	50.7	60.9	44.8	48.3	58.9
16	46.6	49.7	59.3	25.0	25.5	35.2	43.7	46.6	56.9	40.7	44.2	54.9
20	44.3	47.4	57.2	25.0	25.5	34.9	41.8	44.7	55.0	38.8	42.3	52.9
25	41.8	44.9	54.5	24.3	24.8	35.0	39.8	42.7	53.2	36.8	40.3	51.0
31.25	39.2	42.3	52.2	23.6	24.1	34.7	37.9	40.8	51.3	34.9	38.4	49.1
62.5	30.0	33.1	43.3	21.5	22.0	32.2	31.9	34.8	45.5	28.9	32.4	43.2
100	22.5	25.6	36.5	20.1	20.6	31.2	27.8	30.7	41.6	24.8	28.3	39.3
200	8.8	12.0	23.2	18.0	18.5	29.2	21.8	24.7	35.7	18.8	22.3	33.4
250	3.5	6.7	18.4	17.3	17.8	29.1	19.8	22.7	33.7	16.8	20.3	31.4
300			13.1		16.8	27.4		18.3	32.0		15.3	29.7
400			4.2		15.9	26.0		15.8	29.2		12.8	26.8
500						24.5			26.2			23.9
550						23.6			24.6			22.5

PREMISES COPPER

Input Impedance (Ohms)	Delay Skew (ns/100m)		Velocity of Propagation (%)		DC Resistance (Ohms/100m)		Resistance Unbalance (%)	
	Guaranteed	Maximum	Typical	Nominal	Maximum	Typical	Maximum	Typical
100+/-15 @ 1-100MHz	CMR	25	16	68	9.38	7.00	3.0	0.5
100+/-22 @ 100-250MHz		25	20	71	9.38	7.04	3.0	0.5
100+/-32 @ 250-550MHz	CMP							

Standards Compliance:

UL 444, UL Listed CMP (NFPA 262), UL Listed CMR (UL 1666), ISO/IEC 11801, ANSI/TIA/EIA 568-B.2-1, UL Verified to Category 6, RoHS 2002/95/EC Compliant.