CMR/CMX Outdoor Sunlight Resistant

# Solid Annealed Copper Conductor Rip Cord Thermoplastic Insulation Flame, Weather, Abrasion and Sunlight Resistant Black PVC Jacket

#### SPECIFICATIONS Pair Count 4 Conductor Solid annealed copper AWG (mm) 24 (0.51) Insulation Polyolefin Pair 1: ColorTip Light Blue, Blue Pair 2: ColorTip Light Orange, Orange Insulation Colors Pair 3: ColorTip Light Green, Green Pair 4: ColorTip Light Brown, Brown Ripcord Non-wicking polyester yarn Tough, flame retardant, weather, sunlight Jacket and abrasion resistant riser PVC Jacket Color Black Characteristic Impedance 100 ± 15 Ohms Nominal Velocity of Propagation 70 % UL 444 CSA C22.2 No. 214-08 UL 1581 UL 1666 Performance Compliance ANSI/TIA-568-C.2 ANSI/ICEA S-90-661-2012 ANSI/TIA/EIA-570-B Article 800, NEC (NFPA 70) RoHS-compliant/RoHS 2-compliant UL, c(UL) Listed CMR NRTL Programs UL, c(UL) Listed CMX Outdoor Sunlight Resistant

ENVIRONMENTAL SPECIFICATIONS AND TESTS					
Operation	-40°F to +167°F (-40°C to +75°C)				
Installation	-40°F to +140°F (-40°C to +60°C)				
ANSI/ICEA S-100-685-2009 Tested down to -67°F (-55°C)	Section 7.1: $-4^{\circ}F$ (-20°C) cold bend test Section 7.2: $+14^{\circ}F$ (-10°C) cold impact test Section 7.3: $-40^{\circ}F$ (-40°C) anvil test				

# PRODUCT DESCRIPTION

The Superior Essex Category 5e CMR/CMX Outdoor Sunlight Resistant cable is specifically designed for extreme sunlight and temperature applications. The level of UV-blocking compounds is the same as in traditional Outside Plant (OSP) cable products with the black color preventing damage from long-term UV sunlight exposure. 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. CMX 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.

Superior Essex CAT 5e CMR/CMX Outdoor Sunlight Resistant black premises cable has been tested and listed as UL® 444 Sunlight Resistant compliant. This designation requires the cable to resist 720 hours of harsh UV and heat, which is more than twice the exposure time of the standard 300 hours required in the CMX Outdoor test. In addition, the CMR listing allows the cable to be used in riser spaces per UL 1666, eliminating the need to transition to fire resistant cables.

### APPLICATIONS

FEATURES

- 10BASE-T through 1000BASE-T Ethernet
- Power over Ethernet (PoE) IEEE 802.3af
- PoE+ IEEE 802.3at Type 1 and 2
- Wi-Fi IEEE 802.11a/b/g/n

# BENEFITS

Combines indoor/outdoor Provides cost-effective solution applications into one product with the added feature of Sunlight Resistant black color jacket Exceeds UL 444 720 hour sunlight resistant specification Meets ANSI/TIA-568-C.2 CAT 5e performance specification Moisture-resistant package Resists damp conditions that might weaken standard packages CableID<sup>®</sup> alpha numeric code Allows both ends of a cable run printed every 2 feet to be easily identifiable without the need to separately label or tone the cable QuickCount<sup>®</sup> marking system Provides remaining length in feet and meters of cable on reel ColorTip® Circuit Easily identifiable conductor Identification System mates even in low-light environments Rip cord applied under jacket Facilitates easy opening RoHS-compliant No heavy metals; and no toxic components Combined indoor/outdoor rating Reduces inventory by eliminating multiple cable types UL 444/UL 1581 Increased life in direct, Sunlight Resistant Listed long term sunlight



#### CAUTIONARY INFORMATION

- Do not use as a substitute for Outside Plant (OSP) cables.
  - Do not use in conduit or direct burial which can flood. These cables are not designed for extended exposure to water.

PART NUMBERS AND PHYSICAL CHARACTERISTICS						
Part Number	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Package	Packages per Pallet		
51-240-E1	0.21 (5.3)	21 (31)	1,000' POP™ box	36		

All information, content, data, specifications, packaging and part numbers detailed herein are subject to change. For the most up-to-date information, please visit SuperiorEssex.com. Purchase of this product is subject exclusively to the then current **Superior Essex International LP Terms and Conditions of Sale for Communications and Energy Cable, Wire and Connectivity Products**, which can be found on our website, SuperiorEssex.com, or provided to you upon request.

Rev 2/16 Ed 13.1



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ELECTRICAL SP	ECIFICATIONS								
		0 20°C Maximum 00 m		NEXT Minimum dB/100 m		ACR Minimum dB/100 m		PSNEXT Minimum dB/100 m	
Frequency	TIA-568-C.2	Superior Essex	TIA-568-C.2	Superior Essex	TIA-568-C.2	Superior Essex	TIA-568-C.2	Superior Essex	
MHz	Specified	Typical	Specified	Typical	Calculated	Typical	Specified	Typical	
1	2.0	1.8	65.3	76.8	63.3	81.0	62.3	75.3	
4	4.1	3.7	56.3	67.8	52.2	70.1	53.3	66.3	
8	5.8	5.4	51.8	63.3	46.0	63.9	48.8	61.8	
10	6.5	6.0	50.3	61.8	43.8	61.8	47.3	60.3	
16	8.2	7.7	47.2	58.7	39.0	57.0	44.3	57.2	
20	9.3	8.6	45.8	57.3	36.5	54.7	42.8	55.8	
25	10.4	9.6	44.3	55.8	33.9	52.2	41.3	54.3	
31.25	11.7	10.8	42.9	54.4	31.2	49.6	39.9	52.9	
62.5	17.0	15.5	38.4	49.9	21.4	40.4	35.4	48.4	
100	22.0	19.8	35.3	46.8	13.3	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		35.0		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-C.2	Superior Essex	TIA-568-C.2	Superior Essex	TIA-568-C.2	Superior Essex	TIA-568-C.2	Superior Essex
	Calculated	Typical	Specified	Typical	Specified	Typical	Specified	Typical
1	60.3	78.3	20.0	33.0	63.8	74.6	60.8	69.3
4	49.2	67.4	23.0	36.0	51.8	62.6	48.8	57.3
8	43.0	61.2	24.5	37.5	45.7	56.5	42.7	51.2
10	40.8	59.1	25.0	38.0	43.8	54.6	40.8	49.3
16	36.1	54.3	25.0	38.0	39.7	50.5	36.7	45.2
20	33.5	52.0	25.0	38.0	37.8	48.6	34.8	43.3
25	30.9	49.5	24.3	37.3	35.8	46.6	32.8	41.3
31.25	28.2	46.9	23.6	36.6	33.9	44.7	30.9	39.4
62.5	18.4	37.7	21.5	34.5	27.9	38.7	24.9	33.4
100	10.3	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

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Rev 2/16 Ed 13.1



TABLE OF CONTENTS