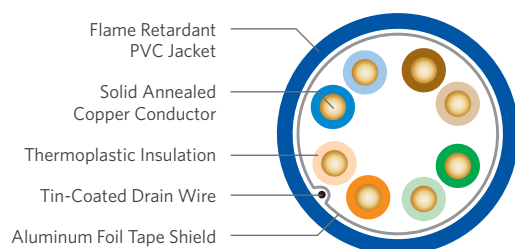


Category 5e+ ScTP (F/UTP)

CMR/CMP



SPECIFICATIONS

Pair Count	4
Conductor	Solid annealed copper
AWG (mm)	24 (0.51)
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
Shield	Aluminum foil tape
Drain Wire	24 AWG tinned copper
Jacket	CMR: Flame retardant (FR) PVC CMP: FR, low smoke PVC
Characteristic Impedance (Ohms)	100 ± 15
Nominal Velocity of Propagation (%)	CMR: 67 CMP: 70
Performance Compliance	UL 444 CSA C22.2 No. 214-08 UL 1666 NFPA 262 ANSI/TIA-568-C.2 Article 800, NEC (NFPA 70) RoHS-compliant
NRTL Programs	UL Verified CAT 5e UL, c(UL) Listed CMR UL, c(UL) Listed CMP

PRODUCT DESCRIPTION

Superior Essex offers Screen Twisted Pair (ScTP) shielded Category 5e+ cables in both plenum and riser versions. The cable has guaranteed performance out to 350 MHz and meets all applicable ANSI/TIA-568-C.2 requirements. The cable consists of four balanced 24 AWG copper pairs. The core is wrapped with an aluminum foil tape and has a tin coated drain wire. The tape wrapped core is jacketed with the appropriate flexible PVC jacket for plenum or riser applications.

APPLICATIONS

- 10BASE-T through 1000BASE-T Ethernet
- Power over Ethernet (PoE) - IEEE 802.3af
- PoE+ - IEEE 802.3at Type 1 and 2
- ATM and token ring
- Applications requiring secure networks or protection from EMI/RFI

FEATURES

- Aluminum foil tape covers all 4-pair
- Exceeds ANSI/TIA-568-C.2 for CAT 5e cable performance
- Guaranteed performance to 350 MHz
- CableID® alpha numeric code printed every 2 feet
- QuickCount® marking system in feet and meters
- ColorTip™ circuit identification system
- Color coded box labels

BENEFITS

- Protects against EMI/RFI and provides greater security
- Assures compliance for all current networking applications (up to 1000BASE-T)
- Assures ample bandwidth headroom
- 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

PART NUMBERS AND PHYSICAL CHARACTERISTICS

Listing	Part Number ¹	Nominal Diameter in (mm)	Approx. Weight lbs./kft (kg/km)	Package	Packages per Pallet
CMR	5F-220-x5	0.28 (7.1)	31 (46)	1,000' Plywood reel	12
CMP	5F-220-x8	0.25 (6.4)	30 (45)	1,000' Plywood reel	12

JACKET COLORS

¹Replace "x" with:

Blue = 2

Gray = 3

White = 4

Green = 5

Yellow = 6

Red = 9

Orange = D

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-C.2	Superior Essex		TIA-568-C.2	Superior Essex		TIA-568-C.2	Superior Essex		TIA-568-C.2	Superior Essex	
	Specified	Guaranteed	Typical	Specified	Guaranteed	Typical	Calculated	Guaranteed	Typical	Specified	Guaranteed	Typical
1	2.0	2.0	1.8	65.3	68.3	79.4	63.3	65.9	77.7	62.3	66.3	77.2
4	4.1	4.0	3.6	56.3	59.3	69.9	52.2	54.9	66.4	53.3	57.3	67.4
8	5.8	5.7	5.1	51.8	54.8	65.1	46.0	48.8	60.0	48.8	52.8	62.7
10	6.5	6.4	5.8	50.3	53.3	63.6	43.8	46.7	57.9	47.3	51.3	61.2
16	8.2	8.2	7.4	47.3	50.3	60.4	39.1	41.9	53.1	44.3	48.3	58.0
20	9.3	9.2	8.2	45.8	48.8	59.0	36.5	39.5	50.9	42.8	46.8	56.6
25	10.4	10.3	9.3	44.3	47.3	57.5	33.9	37.0	48.3	41.3	45.3	55.1
31.25	11.7	11.6	10.5	42.9	45.9	56.0	31.2	34.3	45.7	39.9	43.9	53.5
62.5	17.0	16.8	14.9	38.4	41.4	51.7	21.4	24.7	36.8	35.4	39.4	49.2
100	22.0	21.7	19.2	35.3	38.3	48.5	13.3	19.5	29.5	32.3	36.3	46.0
155		27.8	24.2		35.5	45.7		9.3	21.6		33.5	43.1
200		32.1	27.8		29.8	43.6		3.5	16.0		27.8	41.0
250		36.5	31.4		28.3	42.0			10.7		26.3	39.4
300		40.5	34.7		27.2	40.4			5.9		25.2	37.7
350		44.4	37.8		26.2	39.3			1.7		24.2	36.8

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	Guaranteed	Typical	Specified	Guaranteed	Typical	Specified	Guaranteed	Typical	Specified	Guaranteed	Typical
1	60.3	64.4	75.4	20.0	20.0	28.5	63.8	63.8	72.6	60.8	60.8	70.6
4	49.2	53.4	64.0	23.0	23.0	35.6	51.7	51.7	60.7	48.7	48.7	59.0
8	43.0	47.3	57.7	24.5	24.5	35.7	45.7	45.7	54.8	42.7	42.7	53.1
10	40.8	45.2	55.6	25.0	25.0	35.9	43.8	43.8	52.9	40.8	40.8	51.1
16	36.1	40.4	50.8	25.0	25.0	35.2	39.7	39.7	48.9	36.7	36.7	47.1
20	33.5	38.0	48.6	25.0	25.0	34.9	37.7	37.7	47.0	34.7	34.7	45.2
25	30.9	35.5	46.0	24.3	24.3	35.2	35.8	35.8	45.1	32.8	32.8	43.3
31.25	28.2	32.8	43.4	23.6	23.6	34.8	33.9	33.9	43.2	30.9	30.9	41.3
62.5	18.4	23.2	34.6	21.5	21.5	31.8	27.8	27.8	37.2	24.8	24.8	35.2
100	10.3	18.0	27.3	20.1	20.1	30.1	23.8	23.8	33.2	20.8	20.8	31.1
155		6.8	19.4		18.8	28.4		19.9	29.3		16.9	27.2
200		1.0	13.9		18.0	27.3		11.7	27.1		10.7	25.0
250			8.6		17.3	26.1		9.8	25.1		8.8	23.1
300			3.8		16.8	25.1		8.2	23.7		7.2	21.5
350					16.3	24.0		6.9	22.5		5.9	20.3