

Elite 10GS™ CAT6A 10G LAN 4 *UTP Cable

Construction:

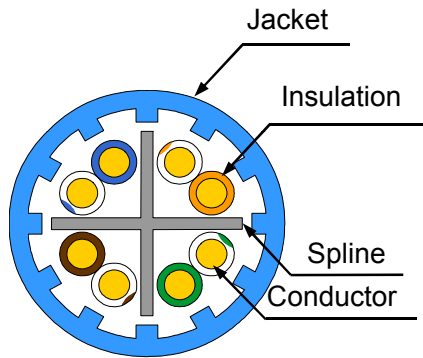
*Unshielded Twisted Pair

Item #	Flame Rating	Jacket	Color	Wt. Lb. / Wt.Kg	O.D.	Packaging Put-Up
TUR2304S03xx	CMR	PVC Riser	xx	44.53 / 20.2	8.40 ± .2mm	1000' Wood Reel
TUP2304S03xx	CMP	Plenum	xx	51.81 / 23.5	8.40 ± .2mm	1000' Wood Reel

xx= (BU) Blue, (WH) White

PRODUCTS FEATURE

- ELITE 10GS LAN SUPPORTS IEEE 802.3an 10GBASE-T STANDARD, AND TIA/EIA 568-B.2-10 DRAFT.7
- ALL MATERIALS COMPLY WITH ROHS STANDARD
- TEST RANGE FROM 1 TO 750 MHZ
- GREAT PERFORMAMNCE WITH HEADROOM OF UP 6Db



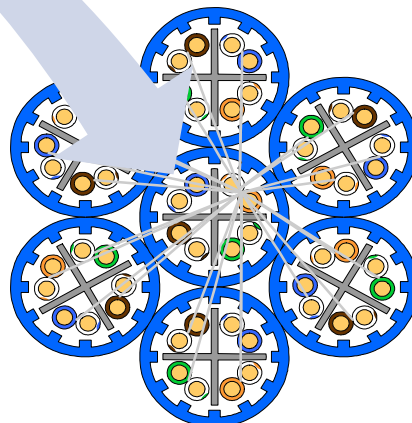
CONSTRUCTION RISER/PLENUM

Jacket: Low-smoke, flame-retardant PVC
 Insulation: PE/FEP
 Spline: PE/FEP
 Conductor: 23 AWG Solid bare copper
 Cable assembly: 4 pairs cabled together with a spline core separator

Disturbed Cable

6-around-1 cable test configuration:

This test is for measuring alien crosstalk loss between pairs of adjacent cables in a 7-cable assembly consisting of the same design. Measure the ANEXT loss and AFEXT loss between each of the pairs of the **disturbed** cable and each pair of every disturbing cable. This will result in 96 measurements each for ANEXT loss and AFEXT loss.



Elite 10GS family-cables are under the 6-around-1 cable test.

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ELECTRICAL PROPERTIES FOR BOTH RISER AND PLENUM

CONDUCTOR DCR: 9.38W/100M@20°

DCR UNBALANCE: 3%MAX

CAPACITANCE UNBALANCE

PAIR/GROUND: 330PF/100M MAX

CHARACTERISTIC

IMPEDANCE: 100Ω ±10%(10-550MHz)

INPUT IMPEDANCE: 100Ω ±12%(1-100MHz)

100Ω ±15%(>100-350MHz)

100Ω ±22%(>350MHz)

RETURN LOSS: 20+7log(f) dB MIN (1-10MHz)

27 dB MIN(10-20MHz)

27-7log(f/20)dB MIN (>20MHz)

INSERTION LOSS: 1.8√f+0.01f+0.2/√f dB/100M MAX

(ATTENUATION) NEAR END(NEXT) CROSSTALK:

48.3 - 15 log(f/100) dB/100M MIN

POWER SUM NEAR END CROSSTALK (PS NEXT):

46.3- 15log(f/100) dB/100M MIN

ATTENUATION TO CROSSTALK RATIO FAR END(ACRF):

31.8- 20log(f/100) dB/100M MIN

POWER SUM ATTENUATION TO CROSSTALK RATIO FAR END

(PS ACRF): 28.8- 20 log(f/100) dB/100M MIN

POWER SUM ALIEN NEAR END CROSSTALK (PS ANEXT):

62.5- 15 log(f/100) dB/100M MIN

POWER SUM ALIEN ATTENUATION TO CROSSTALK RATIO

FAR END (PS AACRF): 38.2- 20 log(f/100) dB/100M MIN 67dB MIN

PROPAGATION DELAY: 534 + 36/ ns/100m MAX

PROPAGATION DELAY SKEW: 25 ns/100m MAX

NOMINAL VELOCITY OF PROPAGATION (NVP):

70% PLENUM 66% NON-PENUM

NOTE: Attenuation To Crosstalk Ratio Far End (ACRF) was previously referred to as Equal Level Far End Crosstalk (ELFEXT)

WHERE f = FREQUENCY IN MHz from 1 to 500 MHz

REFERENCE ELECTRICAL CHARACTERISTICS

FREQ (MHz)	INS LOSS (dB/100m)	RETURN LOSS (dB/100m)	NEXT (dB/100m)	PS NEXT (dB/100m)	ACRF (dB/100m)	PS ACRF (dB/100m)	PROP DELAY (dB/100m)	ALIEN CROSSTALK	
								PS ANEXT (dB/100m)	PS AACRF (dB/100m)
	max	min	Min	min	min	min	max	min	min
1	2	20	78.3	76.3	71.8	68.8	570	67	67
4	3.7	24.2	69.3	67.3	59.8	56.8	552	67	66.2
8	5.2	26.3	64.8	62.8	53.7	50.7	546.7	67	60.1
10	5.9	27	63.3	61.3	51.8	48.8	545.4	67	58.2
16	7.4	27	60.2	58.2	47.7	44.7	543	67	54.1
20	8.3	27	58.8	56.8	45.8	42.8	542	67	52.2
25	9.3	26.3	57.3	55.3	43.8	40.8	541.2	67	50.2
31.25	10.4	25.6	55.9	53.9	41.9	38.9	540.4	67	48.3
62.5	14.9	23.5	51.4	49.4	35.9	32.9	538.6	65.6	42.3
100	19	22.1	48.3	46.3	31.8	28.8	537.6	62.5	38.2
155	24	20.8	45.4	43.4	28	25	536.9	59.6	34.4
200	27.5	20	43.8	41.8	25.8	22.8	536.5	58	32.2
250	31	19.3	42.3	40.3	23.8	20.8	536.3	56.5	30.2
300	34.2	18.8	41.1	39.3	22.3	19.3	536.1	55.3	28.7
350	37.2	18.3	40.1	38.1	20.9	17.9	535.9	54.3	27.3
400	40	17.9	39.3	37.3	19.8	16.8	535.8	53.5	26.2
500	45.3	17.5	37.8	35.8	17.8	14.8	535.6	52	24.2
550	47.7	17.2	37.2	35.2	-	-	-	-	-
600	50.1	16.9	36.6	34.6	-	-	-	-	-
650	52.4	16.7	36.1	34.1	-	-	-	-	-
750	56.8	16	35.2	33.2	-	-	-	-	-