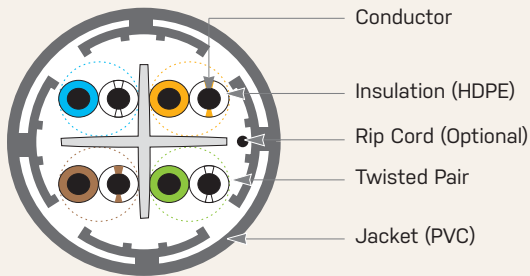


First Gen

# Category 6A 650MHz UTP

U6A650-004-xxxx



## Description

- Capable of handling full broadband and baseband video signals
- Tight balance requirements improve cable performance
- Every master reel is tested for electrical performance compliance
- Dual length marking in feet and meters from 1000 ft (305 m) to 0 ft (0 m)

## Application

- Horizontal Distribution & Backbone Cabling
- 155Mbps ATM, 100Mbps TP-PMD
- 10/100/1000/10GBASE-T (IEEE 802.3)
- ISDN, ADSL
- ATM LAN 1.2G
- PoE, PoE+ and PoE++ (IEEE 802.3bt draft. Type 3 & 4)

## Certifications



## Part Numbers

JACKET COLOR	DESCRIPTION	
	Category 6A UTP Cable, 4-Pair, Riser Rated	Category 6A UTP Cable, 4-Pair, Plenum Rated
Blue	U6A650-004-RBL4	U6A650-004-PBL4
White	U6A650-004-RWH4	U6A650-004-PWH4
Grey	U6A650-004-RGY4	U6A650-004-PGY4
Black	U6A650-004-RBK4	U6A650-004-PBK4
Yellow	U6A650-004-RYL4	U6A650-004-PYL4
Green	U6A650-004-RGN4	U6A650-004-PGN4
Red	U6A650-004-RRD4	U6A650-004-PRD4
Orange	U6A650-004-ROR4	U6A650-004-POR4
Violet	U6A650-004-RV4	U6A650-004-PV4

## Performance Characteristics

Meet or exceed TIA-568-C.2 Category 6A requirements

FREQUENCY <sup>1</sup> (MHZ)	RETURN LOSS (RL) MINIMUM DB/100 M			INSERTION LOSS (ATTENUATION) MAXIMUM DB/100 M		
	TIA-568-C.2 Standard	U6A650-R Typical	U6A650-P Typical	TIA-568-C.2 Standard	U6A650-R Typical	U6A650-P Typical
1	20.0	37.27	41.08	2.1	1.78	1.62
4	23.0	33.71	31.43	3.8	3.46	3.18
10	25.0	36.72	33.12	5.9	5.62	5.19
16	25.0	37.27	34.04	7.5	7.14	6.60
20	25.0	37.81	34.91	8.4	8.00	7.43
31.25	23.6	40.45	37.59	10.5	10.04	9.36
62.5	21.5	39.91	37.55	15.0	14.47	13.68
100	20.1	39.33	36.52	19.1	18.41	17.61
200	18.0	38.02	36.14	27.6	26.44	25.91
250	17.3	36.34	35.71	31.1	29.55	29.19
300	16.8	34.97	33.50	34.3	33.13	32.60
400	15.9	34.27	32.27	40.1	37.71	38.01
500	15.2	34.08	31.56	45.3	42.53	43.27
600		30.00	28.00		47.00	47.00
650		30.00			49.00	49.00

FREQUENCY <sup>1</sup> (MHZ)	NEAR END CROSS TALK (NEXT) MINIMUM DB/100 M			EQUAL LEVEL FAR END CROSS TALK (ELFEXT) MINIMUM DB/100 M		
	TIA-568-C.2 Standard	U6A650-R Typical	U6A650-P Typical	TIA-568-C.2 Standard	U6A650-R Typical	U6A650-P Typical
1	74.3	89.37	88.21	67.8	88.93	88.19
4	65.3	83.69	82.63	55.8	83.49	83.83
10	59.3	81.90	74.19	47.8	82.35	77.18
16	56.2	75.24	73.86	43.7	77.09	74.12
20	54.8	72.85	73.24	41.8	72.19	71.22
31.25	51.9	67.22	67.10	37.9	68.05	63.13
62.5	47.4	62.60	63.26	31.9	63.08	62.93
100	44.3	61.45	58.33	27.8	58.99	56.97
200	39.8	54.77	53.27	21.8	56.08	55.22
250	38.3	54.73	53.00	19.8	54.81	54.90
300	37.1	53.36	52.54	18.3	54.53	48.22
400	35.3	47.48	50.50	15.8	53.51	47.49
500	33.8	46.25	45.81	13.8	42.66	43.99
600		45.00	45.00		42.00	42.00
650		45.00	45.00		41.50	41.50

<sup>1</sup>Value above 550Mhz are for informational purposes only

## Technical Details

ITEM	UNIT	RISER	PLENUM	
Conductor DC Resistance	Max. Ohms/100 m	9.38	9.38	
Resistance Unbalance	Max. %	5	5	
Mutual Capacitance	Max. nF/100 m	5.6	5.6	
Capacitance Unbalance	Max. pF/100 m	330	330	
Delay Skew	Max. ns	45	45	
Nominal Velocity of Propagation	%	67	70	
Operating Temperature	°F (°C)	-4 to +140 (-20 to +60)	-4 to +167 (-20 to +75)	
Storage Temperature	°F (°C)	-4 to +176 (-20 to +80)	-4 to +194 (-20 to +90)	
Bending Radius		4 x Cable diameter	4 x Cable diameter	
Packaging:	Type	1 kft (305 m)	Reel	
	Weight	lb/kft (kg/km)	43 (65)	
	Packages Per Pallet		12	
Materials:	Conductors	23 AWG, Solid copper	23 AWG, Solid copper	
	Insulation	in (mm)	0.045 (1.15), HDPE	0.041 (1.05), FEP
	Jacket	in (mm)	0.331 (8.4), PVC	0.327 (8.3), LS-PVC (Plenum Rated)
Approvals:	Safety	UL 444, UL 1666	UL 444, NFPA 262	
	Performance	TIA-568-C.2 "Balanced Twisted-Pair Telecommunications Cabling and Components Standards"		