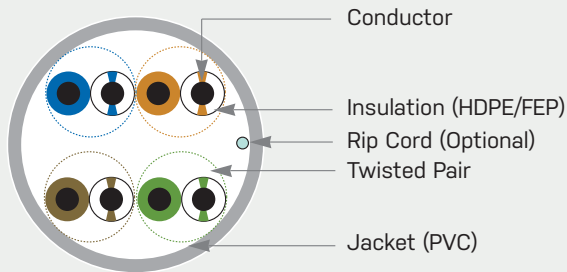
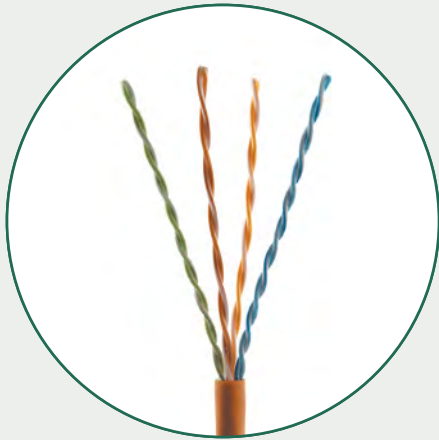


# Category 6 500MHz UTP

U6500-004-xxxx



## Description

- 105°C UL Listed & 0.6A-LP Rating for CMP
- Filler-less design simplifies installation
- Capable of handling full broadband and baseband video signals
- 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)
- Lightweight, easy-pull Reelex II packaging eases installation
- Slim cable outer diameter of 0.213 in. (Riser Rated), 0.205 in. (Plenum Rated)

## Application

- Horizontal Distribution & Backbone Cabling
- 155Mbps ATM, 100Mbps TP-PMD
- 10/100/1000BASE-T (IEEE 802.3)
- 10GBASE-T up to max. 55 m
- ISDN, ADSL
- ATM LAN 1.2G
- PoE, PoE+ (IEEE 802.3af, IEEE 802.3at)

## Certifications



## Part Numbers

JACKET COLOR*	DESCRIPTION	
	Category 6 UTP Cable, Non X-filler 4-Pair, Riser Rated	Category 6 UTP Cable, Non X-filler 4-Pair, Plenum Rated
Blue	U6500-004-RBL2	U6500-004-PBL2
White	U6500-004-RWH2	U6500-004-PWH2
Grey	U6500-004-RGY2	U6500-004-PGY2
Black	U6500-004-RBK2	U6500-004-PBK2
Yellow	U6500-004-RYL2	U6500-004-PYL2
Green	U6500-004-RGN2	U6500-004-PGN2
Red	U6500-004-RRD2	U6500-004-PRD2
Orange	U6500-004-ROR2	U6500-004-POR2
Violet	U6500-004-RVL2	U6500-004-PVL2

\*Other jacket colors available upon request with leadtime and minimum order quantities

## Performance Characteristics

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

FREQUENCY <sup>2</sup> (MHZ)	RETURN LOSS (RL) MINIMUM DB/100 M			INSERTION LOSS (ATTENUATION) MAXIMUM DB/100 M		
	TIA-568-C.2 Standard	U6500-R Typical	U6500-P Typical	TIA-568-C.2 Standard	U6500-R Typical	U6500-P Typical
1	20.0	26.65	27.52	2.0	1.75	1.67
4	23.0	34.63	30.54	3.8	3.45	3.28
10	25.0	36.19	30.78	6.0	5.47	5.37
16	25.0	38.58	32.42	7.6	6.97	6.85
20	25.0	44.48	36.16	8.5	7.79	7.70
31.25	23.6	39.60	35.64	10.7	9.81	9.74
62.5	21.5	39.56	34.45	15.4	14.13	14.09
100	20.1	37.99	33.04	19.8	18.08	18.09
200	18.0	34.95	32.49	29.0	26.03	26.44
250	17.3	34.38	27.51	32.8	29.33	29.69
300		38.10	29.85		33.13	33.20
400		33.81	34.86		38.34	38.85
500		35.61	32.97		43.56	43.95

FREQUENCY <sup>2</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	U6500-R Typical	U6500-P Typical	TIA-568-C.2 Standard	U6500-R Typical	U6500-P Typical
1	74.3	94.84	88.35	67.8	92.41	88.03
4	65.3	84.54	74.40	55.8	83.86	75.90
10	59.3	77.86	71.53	47.8	78.20	70.39
16	56.2	75.98	69.46	43.7	76.86	68.13
20	54.8	73.23	69.13	41.8	74.63	65.46
31.25	51.9	70.48	62.72	37.9	72.35	61.81
62.5	47.4	65.07	60.55	31.9	71.30	58.69
100	44.3	63.12	55.10	27.8	64.88	57.71
200	39.8	58.39	54.33	21.8	60.37	49.03
250	38.3	50.62	53.58	19.8	56.90	44.99
300		52.51	49.97		48.40	38.38
400		54.01	55.13		35.33	41.00
500		46.70	64.98		42.04	32.59

<sup>2</sup>Value above 250Mhz 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 +140 (-20 to +60)
Storage Temperature	°F (°C)	-4 to +176 (-20 to +80)	-4 to +176 (-20 to +80)
Bending Radius		4 x Cable diameter	4 x Cable diameter
Packaging:	Type	1 kft (305 m)	Reelex II
	Weight	lb/kft (kg/km)	21.5 (32)
	Packages Per Pallet		36
Materials:	Conductors	23 AWG, Solid copper	23 AWG, Solid copper
	Insulation	in (mm)	0.039 (0.99), HDPE
	Jacket	in (mm)	0.213 (5.4), PVC
Approvals:	Safety	UL 444, UL 1666	UL 444, NFPA 262
	Performance	TIA-568-C.2 "Balanced Twisted-Pair Telecommunications Cabling and Components Standards"	