

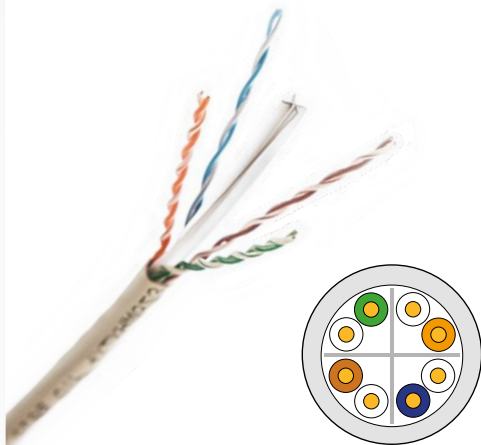
UTP (U/UTP) cable 4x2x0,54, Category 6, 400 MHz

P/N: KE400U23

1
Gigabit

Cat.6

400
MHz



features

- unshielded cable with pairs separated by a cross filler and PVC sheath
- enables transmission of all high-speed protocols up to 1000BASE-T
- characterized up to 400 MHz
- not shielded against electromagnetic interference

application

- primary (Campus), secondary (Riser), tertiary (Horizontal)
- IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T
- IEEE 802.5 16 MB; ISDN; TPDDI; ATM

construction

Conductor	bare copper wire, 0,54 mm
Insulation	polyethylene, Ø 0,95 mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core
Sheath	PVC, gray RAL7035
Outer cable diameter	5,3 mm

mechanical properties

Min. bending radius	installation	43 mm
	operation	22 mm
Temperature range	installation	0 °C to +50 °C
	operation	-20 °C to +60 °C
Max. tensile load	100 N (10 kg)	
Weight (netto)	36 kg / km	

electrical properties at 20°C

Conductor resistance	-	≤ 176 Ω/ km
Resistance unbalance	-	≤ 2%
Insulation resistance	(500V)	≥ 5000 MΩ x km
Capacity	at 800 Hz	nom. 48 nF/ km
Capacity unbalance	(pair/ground)	≤ 1500 pF/ km
Characteristic impedance	at 100 MHz	(100 ± 5) Ω
Nominal velocity of propagation (NVP)	-	cca 67%
Propagation delay	Nominal	535 ns/100 m
Delay skew	Nominal	20 ns/100 m
Test voltage	(DC, 1 min) core/core; core/screen	1000 V

transmission properties at 20°C

f (MHz)	Attenuation (dB/100m)		NEXT (dB)		PS-NEXT (dB)		ACR (dB/100m)		PS-ACR (dB/100m)		ELFEXT (dB/100m)		PS-ELFEXT (dB/100m)		Return loss (dB)	
	max.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	
1,0	2,1	1,9	74	78	72	75	72,0	76,1	70,0	73,1	68	82	65	80		20,0
4,0	3,8	3,8	65	69	63	66	61,2	65,2	59,2	62,2	56	70	53	68		23,0
10,0	6,0	6,0	59	63	57	60	53,0	57,0	51,0	54,0	48	62	45	60		25,0
16,0	7,6	7,6	56	60	54	57	48,4	52,3	46,4	49,3	44	58	41	56		25,0
20,0	8,5	8,5	55	59	53	56	46,5	50,0	44,5	47,0	42	56	39	54		25,0
31,2	10,7	10,7	52	56	50	53	41,3	45,0	39,3	42,0	38	52	35	50		23,6
62,5	15,5	15,1	47	51	45	48	31,5	36,0	29,5	33,0	32	46	29	44		21,5
100,0	19,9	19,1	44	48	42	45	24,1	28,9	22,1	25,9	28	42	25	40		20,1
125,0	22,5	21,3	43	47	41	44	20,5	25,2	18,5	22,2	26	40	23	38		19,5
155,5	25,4	23,8	42	45	40	42	16,6	21,3	14,6	18,3	24	38	21	36		18,8
175,0	27,1	25,3	41	44	39	41	13,9	19,1	11,9	16,1	23	37	20	35		18,4
200,0	29,2	27,0	40	44	38	41	10,8	16,5	8,8	13,5	22	36	19	34		18,0
250,0	33,0	32,0	38	42	36	39	5,0	10,0	2,0	7,0	20	34	17	32		17,3
300,0		36,1		41		38		4,8		1,8		32		30		
400,0		41,7		39		36		-2,7		-5,7		30		28		