

Electrical characteristics for Cat 5e UTP

Impedance 100MHz	100	Ω
DC-Loop resistance	≤ 0.188	Ω/m
Propagation speed	0.64	c
Propagation delay	4.80-5.30	ns/m
Delay skew < 100 MHz	< 0.20	ns/m
Capacitance 800Hz	52	pF/m
Inductance	525	nH/m
Cutoff frequency	50323	Hz
Max tensile load, during installation	100	N
Wire size	AWG-24 (0.205 mm ²)	
Insulation thickness	0.245	mm
Maximum current per conductor	0.577	A
Temperature operating	-55 to +60	$^{\circ}\text{C}$

Solid vs stranded



Stranded with alignment block











TIA/EIA-568-A.1-2001 T568A Wiring

Pin	Pair	Wire	Color
1	3	1	 white/green
2	3	2	 green
3	2	1	 white/orange
4	1	2	 blue
5	1	1	 white/blue
6	2	2	 orange
7	4	1	 white/brown
8	4	2	 brown

TIA/EIA-568-B.1-2001 T568B Wiring

Pin	Pair	Wire	Color
1	2	1	 white/orange
2	2	2	 orange
3	3	1	 white/green
4	1	2	 blue
5	1	1	 white/blue
6	3	2	 green
7	4	1	 white/brown
8	4	2	 brown

USOC/RJ61 Wiring

Pin	Pair	Wire	Color
1	4	tip	 white/brown
2	3	tip	 white/green
3	2	tip	 white/orange
4	1	ring	 blue
5	1	tip	 white/blue
6	2	ring	 orange
7	3	ring	 green
8	4	ring	 brown