

Maximum Distances for Network Cabling

	Ethernet	Fast Ethernet	Gigabit Ethernet	10 Gigabit Ethernet	40 Gigabit Ethernet
Alternate Name			1GbE	10GbE	40GbE
IEEE Standard	10BASE-T	100BASE-T/100BASE-TX	1000BASE-T	10GBASE-T	N/A ^{#1}
Transmission Speed	10Mbps	100Mbps	1000Mbps or 1Gbps	10Gbps	40Gbps
Cat 5e Max. Distance	100 metres	100 metres	100 metres	N/A	N/A
Cat 6 Max. Distance	100 metres	100 metres	100 metres	37 metres ^{#2}	N/A
Cat 6a Max. Distance	100 metres	100 metres	100 metres	100 metres	N/A
Cat 7/7a Max. Distance	100 metres	100 metres	100 metres	100 metres	50 metres ^{#3}

^{#1} There is no current standard for 40GbE over UTP (unshielded twisted pair) or STP (shielded twisted pair) cabling

^{#2} 37 metres in a hostile alien crosstalk environment (noise from motors or fluorescent lights) and up to 55 metres in a favourable alien crosstalk environment

^{#3} Simulation results have shown this , however there is no guarantee such applications will ever exist