

Computer cables

Technology, Information Technology



Unshielded Twisted Pair Network Cable (Affiliation) Some of the environmental conditions that can cause interference to UTP cable include radar signals that disrupt the movement of the cable. External noise or electrical "noise" also interferes with the capacity of a cable to go far (Faber & Rybinski, 2015). Other environmental conditions that disrupt a UTP cable are extreme weather conditions where low temperatures make cables rigid and brittle while high temperatures degrade the material that constructs a cable. The UV radiation in sunlight also causes UTP cable interference. Notably, some of the tell-tale signs of UTP cable interference include loss of cable data, current drainage, attenuation, corruption of data, and delays in signals (Faber & Rybinski, 2015). However, we can alleviate UTP cable interference by adopting wire transposition and by balancing the cable, using media filters (Faber & Rybinski, 2015).

Three prominent 802.11 wireless standards apply in various homes and businesses. The 802.11a wireless standard accommodates signals that broadcast on multiple frequencies (IEEE, 2015). 802.11a operates on a 5GHz range and a bandwidth of 54Mbps. 802.11a is very expensive. The 802.11b wireless standard operates in the 2.4GHz range and presents 11Mbps of bandwidth (IEEE, 2015). It is cheaper than the 802.11a wireless standard. Additionally, 802.11g is the dominant 802.11 wireless standard and costs the same as 802.11b. Just like 802.11b, 802.11g standard operates in the 2.4GHz range (IEEE, 2015). Notably, the 802.11g standard has two times the speed of 802.11a. Some common sources that interfere with these networks include reflected radio frequencies, radar signals, cordless phones, and Bluetooth interference. However, we can troubleshoot these wireless

networks by looking for internet connections, and wireless network adapter (Walton, 2015).

References

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