

ABSTRACT

In the design data communication network, there are some important factor, such as bandwidth, limited transmission, interferensi, and the number of client. In the base, that four of factor influence the transmission trouble (noise, damping and distortion). For local network, especially with twisted pair cable as transmission media, their transmission is verry sensitive with external electromagnetic interferensi. For that reason, the signal quality which transmitted not so goods.

One of alternative to solve this problem is choose the precise data encoding with flow control and flow error for control and detect the mistake in data transmission process. Some of data encoding for data transmission in LAN network i.e, MLT-3, 4B5B, 8B6T and 8B10B. From all that data encoding, MLT-3 and 8B10B are able for transmission media twisted pair (UTP).

With MLT-3 and 8B10B encoding, data rate and transmission rate increase because decreasing of damping during transmission process. Beside that, they have good quality signal because 8B10B encoding have disparity control for bit synchronization.