
Topic / Issue: Thin Ethernet Cabling

Written By: Scott Young

(Other associated names are Coax, BNC, 10Base-2 and Cheapernet)

Following rules apply when using Thin Ethernet cabling.

A trunk segment may not exceed 185m.

Up to 5 trunk segments may be connected through 4 repeaters.

Use only 3 of these segments for network nodes. Others are for adding distance only.

The entire network trunk may not exceed 925m.

Minimum cable distance between stations is 0.5m.

Maximum number of nodes per trunk segment is 30 including repeaters.

Both ends of the trunk segment must be terminated with a terminating resistor matching the rating of the cable (50 Ohms).

One end of the cable should be connected to ground.

The Advantages of Thin Ethernet:

Technology and standards are mature, which promotes compatibility and interoperability of different vendors' equipment.

Resists EMI better than twisted pair.

Supports higher bandwidths than twisted pair.

Very cheap.

The Disadvantages of Thin Ethernet:

Coax cable is susceptible to EMI and eavesdropping.

Should the cable break, or become faulty, the entire segment is inactive.

Time consuming in finding faults.

Short distances - max 185m per segment.

Summary:
(If required)