ETHERNET

CyberQuince

ETHERNET PROTOCOL

Ethernet is a communication protocol which connects devices on a network over a <u>wired</u> connection.

7 byte	1 byte	6 byte	6 byte	2 byte	46 to 1500 byte	4 byte
Preamble	Start Frame Delimiter	Destination Address	Source Address	Length	Data	Frame Check Sequence (CRC)

Standard	IEEE/Ethernet Specification	Speed	Cable	Minimum Cable Grade	Maximum Distance
10Base5	802.3	10Mbs	Coaxial	RG-8	500 meter
100BaseT/TX	802.3u	100 Mbps	UTP	Cat 5	100 meters
10Base2	802.3a	10Mbps	Coaxial	RG-58	200 meter
100BaseFX	802.3u	100 Mbps	MMF or SMF	N/A	2 km on MMF & 10 km on SMF
10Base-T	802.3i	10 Mbps	UTP	Cat 3	100 meters
1000BaseT	802.3ab	1000 Mbps	UTP	Cat 5/Cat6	100 meters
40 Gigabit Ethernet	802.3ba	40 Gbps	MMF, SMF & copper	N/A	40 km on SMF, 7 meters on copper
100 Gigabit Ethernet	802.3bj & 802.3bm	100 Gbps	N/A	MMF, SMF	100 km

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