

CABLES FOR EACH NETWORK

Voice-grade UTP

Data-grade UTP (IBM Types 3 and 4)

STP (IBM Type 1)

RG-62 (coaxial cable)

Thicknet coaxial cable

Thinnet coaxial cable

Fiber-optic cable

TWISTED-PAIR (IBM specification)

Specification

Shielded or unshielded

Gauge

Number of pairs

Data rate (Mbps)

Attenuation (dB/km.)

Near-end crosstalk (dB)

Characteristic impedance (ohms)

* Type 2 also includes 4 pairs of voice-grade lines; specifications are given for data lines only.

N/A Not applicable: The specification does not detail this characteristic.

COAXIAL CABLE

Specification

Type

Gauge

Data rate (Mbps/sec)

Attenuation (dB/1,000 ft.)

Characteristic impedance (ohms)

FIBER-OPTIC (IBM/FDDI specification)

Specification (for 62.5-/125-micron cable)

Attenuation (dB/km.)

Sheet1

ARCnet	Ethernet	Token-Ring	FDDI
y	n	n	n
y	y	y	n
n	n	y	n
y	n	n	n
n	y	n	n
n	y	n	n
y	y	y	y

Type 1 Shielded 22 solid	Type 2 Shielded 22 solid	Type 3 Unshielded 22-24 solid	Type 6 Shielded 26 stranded	Type 9 Shielded 26 solid or stranded
	2 2*		4	2
	16	16	1	16
	45	45	8	66
	-40	-40 N/A		-34
	150	150 84-113		150

RG-58/U Commonly used for thinnet 20 solid or stranded	10Base5 Ethernet trunk cable (thicknet) 2.17-mm. solid	10Base2 Ethernet trunk cable (thinnet) 0.89-mm. solid
	10	10
	14	5.18
50-53		50

850 nm.	1,300 nm.
3.75	1.50