

AMPLIFIER

A device used to increase the operating level of an input signal. Used in a cable system's distribution plant to compensate for the effects of attenuation caused by coaxial cable and passive device losses.

ANSI

American National Standards Institute

ATTENUATION

The difference between transmitted and received power due to loss from lines, electronic components, or other transmission devices; usually expressed in decibels (dB).

BODY

Main or largest portion of a connector to which other components are attached.

BRAID

Weave of metal fibers used as a shield covering for an insulated conductor or a group of insulated conductors.

BULKHEAD

Term used to define a mounting style of connectors. Bulkhead connectors are designed to be inserted into a panel cutout from the front or the rear of the panel, and typically secured with a jam nut.

COAXIAL CABLE

Cable composed of an insulated central conducting wire, wrapped in another cylindrical conducting wire or braid. Coax cable has great capacity to carry high speed data typically used in Cable TV, connecting computers and central office switching.

CONTACT

Electrically conductive component designed for use in a multi-circuit connector.

CONTACT ENGAGING and SEPARATING FORCE

Force required to either engage or separate contacts.

CONTACT RESISTANCE

Measurement of electrical resistance of mated contacts when assembled in a connector under typical service use.

DECIBEL (dB)

A unit of measurement which expresses the ratio of two power levels on a logarithmic scale. It is used in cable systems to specify losses, k gains, and other ratios of power. The decibel is one-tenth of a Bel.

FCC

Federal Communications Commission

IMPEDANCE

Resistance to the flow of AC current. In telecommunications and broadcast systems, the characteristic impedance is 75 ohms. If all cable and devices are equal to the characteristic impedance, maximum signal will be transferred with little or no reflection.

IMPEDANCE MISMATCH

A situation that results when two components are connected, each having a different characteristic impedance. This generally results in adverse attenuation and return loss.

INSERTION LOSS

That property between the input and output of a device causing a predictable signal loss.

INTERMODULATION

Beats and harmonics creating interference due to the mixing of more than one carrier in an amplifying device. Usually to non-linear.

ISO

International Standards Organization

MATCHED IMPEDANCE

Coupling of two components or systems in such a way that the impedance of one system equals the impedance of the other system.

NEBS

National Equipment Building Systems

OHM'S LAW

The relationship between voltage, current, and resistance in an electronic circuit. The third quantity can be found if two are known.

PASSIVE DEVICE

A device used in a cable system not requiring electrical power to operate. It normally represents loss to signals passing through it. Examples of passive devices are splitters, directional couplers, pads, and equalizers.

RETURN LOSS

The value (in decibels) of the ratio of the power or voltage loss between the forward (transmitted) wave and the reflected wave, as a result of impedance mismatch.

RETURN PATH

The band of frequencies used to return signals to the cable head-end either as control data or for redistribution on the forward path.

RF

Abbreviation for "radio frequency." Typically between 300KHz through 3GHz.

RG/U

(R—radio frequency, G—government approval number, U—universal specification). Symbol for Government specified coaxial cable.

VSWR

Abbreviation for Voltage Standing Wave Ratio, a measure of return loss of a transmission circuit.