

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q
R | S | T | U | V | W | X | Y | Z

Accelerated Aging : A test in which voltage, temperature, etc. are increased above normal operating values to obtain observable deterioration in a relatively short period of time. The plotted results give expected service life under normal conditions.

Admittance : The measure of the ease with which an alternating current flows in a circuit. The reciprocal of impedance.

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Baud : Unit of data transmission rate, based on the number of signal elements or symbols transmitted per second.

Beacon : Low-power carrier generated by an auxiliary transmitter. May be unmodulated for propagation tests or tracking, or modulated with telemetry or tracking data.

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Capacitance : The ratio of the electrostatic charge on a conductor to the potential difference between the conductors required to maintain that charge.

Carrier-to-Noise Ratio (CNR) : The ratio of the received carrier power to the noise power in a given bandwidth expressed in decibels. The CNR is an indicator of how well an earth receiving station will perform in a particular location, and is calculated from satellite power levels, antenna gain and the combined antenna and LNA noise temperature.

Characteristic Impedance : The impedance that, when connected to the output terminals of a transmission line of any length, makes the line appear infinitely long. The ratio of voltage to current at every point along a transmission line on which there are no standing waves.

Cross Modulation : A form of interference caused by the modulation of one carrier affecting that of another signal. It can be caused by overloading an amplifier as well as by signal imbalances at the headend.

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DAP : Double Amplitude Peak. Peak-to-Peak measurement (especially of a composite video signal)

dB : decibel. A means of expressing ratios logarithmically. Number of dB = $10 \times \log$ (base 10) of power ratio. Used to express power gain in amplifiers or power loss in passive circuits or cables.

dB_i : dB antenna gain relative to an isotropic source.

dB_M : dB power relative to one milliwatt.

dB_W : The ratio of the power to one Watt expressed in decibels.

Decibel (dB) : A unit to express differences of power level. Used to express power gain in amplifiers or power loss in passive circuits or cables.

Decoding Margin : The extent by which SNR (or E_b/N_0) exceeds a value giving an unacceptable BER. (Also Eye Height)

Deviation : The level of modulation of an FM signal - the extent by which the baseband or subcarrier signal shifts the main carrier frequency.

Dielectric Strength : The voltage which an insulation can withstand before breakdown occurs. Usually expressed as a voltage gradient (such as volts per mil).

Dielectric Constant (K) : The ratio of the capacitance of a condenser with dielectric between the electrodes to the capacitance when air is between the electrodes. Also called Permittivity and Specific Inductive Capacity.

Differential Gain/Phase : Video (color) non-linear distortion parameters.

Dispersion : The effect of group delay of a wideband transmission channel changing with frequency, such that different time delays are imparted to components of different frequencies. Most notice able with pulse signals. Not to be confused with Dispersal.

Dissipation Factor : The tangent of the loss angle of the insulating material. (Also referred to as loss tangent, $\tan \delta$, and approximate power factor).

Drifting : An instability in a present voltage, frequency or other electronic circuit parameter.

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E_b/N_0 Energy-per-Bit-to-Noise-Power-density ratio. The digital equivalent of C/N_0 .

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G/TT (G upon T) : Gain-to-noise-Temperature ratio of a receiving system; its sensitivity "Figure of Merit".

Group Delay : A signal distortion parameter.

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Hum Bars : A form of interference seen as horizontal bars or black regions passing across the field of a television screen.

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IMD : Intermodulation Distortion (in nonlinear system).

Impedance : The total opposition that a circuit offers to the flow of alternating current or any other varying current at a particular frequency. It is a combination of resistance R and reactance X , measured in ohms.

Insulation Resistance : The ratio of the applied voltage to the total current between two electrodes in contact with a specific insulation, usually expressed in megohms - M feet.

Isolator : Transmission-line component which passes signals with low loss in a preferred direction, while presenting high attenuation in the reverse direction.

ITS : Insertion Test Signal (also VITS) for monitoring a channel's video performance parameters.

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Micro : A numerical prefix denoting one-millionth (10^{-6}).

Mil : A unit used in measuring diameter of a wire or thickness of insulation over a conductor. One one-thousandth of an inch (.001").

Modulation Index : The ratio of peak deviation to highest modulating frequency, in an FM system.

Multiburst : A video test waveform included in ITS.

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Noise Figure : Measurement of noise contribution of an amplifier relative to a noise-free amplifier at a reference temperature. Usually expressed in dB for Ku-band amplifiers.

Noise Temperature : A measure of the amount of thermal noise present in a system or device. The lower the noise temperature, the better the performance.

Noise Measure (of an amplifier) : The Noise figure of a theoretical infinite chain of identical amplifiers.

Noise : An unwanted signal which interferes with reception of the desired information. Noise is often expressed in degrees Kelvin or in decibels.

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OBM : Out of band noise.

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Phase Distortion : A distortion of the phase component of a signal. This occurs when the phase shift of an amplifier is not proportional to frequency over the design bandwidth.

Pre-emphasis : A method of improving SINR in an FM system, by increasing deviation at high (relative to low) baseband frequencies, according to a defined function.

Psophometry : A type of channel noise measurement.

Pulse and Bar : A video test waveform, included in ITS.

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Reference Signal : A highly stable signal used as a standard against which other variable signals may be compared and adjusted.

Reflection Loss : The part of a signal which is lost due to reflection of power at a line discontinuity.

Return Loss : A ratio of the amount of reflected signal to the total available signal entering a device expressed in decibels.

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S/NR : Signal-to Noise Ratio. A measure of how clean (noise-free) the recovered baseband signal is.

Saturation : Operating point of a non-linear amplifier when drive level is adjusted to obtain maximum output.

Signal-to-noise ratio : The ratio of signal power to noise power in a specified bandwidth, usually expressed in decibels.

Stairstep (UK Stircase) : A video test waveform, included in ITS.

Sweep Test : Pertaining to cable, checking frequency response by generating an rf voltage whose frequency is varied back and forth through a given frequency range at a rapid constant rate and observing the results of an oscilloscope.

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VHRR : Very High Resolution Radiometer.

VITS : Vertical-interval Test Signal (US); Vision Insertion Test Signal (Europe). See ITS.

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Weighting : Correction of SNR measurements to take into account such factors as bandwidth and annoyance value.

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Y-Factor : A method of measuring noise figure and G/T.