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The IEEE Standard  
Dictionary of Electrical  
and Electronics Terms

Sixth Edition



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# The IEEE Standard Dictionary of Electrical and Electronics Terms

Sixth Edition

Standards Coordinating Committee 10, Terms and Definitions  
Jane Radatz, Chair

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real) time equals live time plus dead time.

(NI) N42.14-1991

(2) The live time, in seconds and fraction thereof, of acquisition of the spectrum. It is expressed as 14 characters including decimal point with leading zeros interpreted as zeros.

(NPS) 1214-1992

(3) The total time of the measurement minus the total dead time.

(NI) N42.12-1994

**live work** Work on or near (e.g., part of tools being used or worker's body less than minimum approach distance) energized or potentially energized lines (i.e., grounding, live tool work, hot stick work, gloving and barehand work)

(PE/T&D) 516-1995

**live zone** The period(s) in the operating cycle of a machine during which corrective functions can be initiated.

(IA) [60]

**LLC** *See*: logical link control.

**LLC frame** A token ring frame containing an LLC PDU exchanged between peer entities using the MAC services.

(C/LM) 8802-5-1995

**LLC sublayer** *See*: logical link control sublayer.

**LME** *See*: layer management entity.

**LMI** *See*: layer management interface.

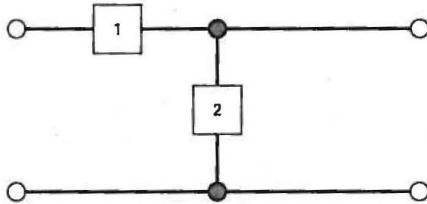
**LMSC** *See*: LAN/MAN Standards Committee.

**LNA** *See*: launch numerical aperture.

**L network** (1) (general) A network composed of two branches in series, the free ends being connected to one pair of terminals and the junction point and one free end being connected to another pair of terminals. *See also*: network analysis.

(Std100) 270-1966w

(2) An unbalanced ladder network composed of a series arm and a shunt arm.



The free ends are left-hand terminal pair; the junction point and one free end are the right-hand terminal pair.

**L network**

(CAS) [13]

**load** (1) (charge) (induction and dielectric heating usage) The material to be heated. *See also*: induction heating.

(IA) 54-1955w

(2) (output) (power and distribution transformers) The apparent power in megavolt-amperes, kilovolt-amperes, or volt-amperes that may be transferred by the transformer.

(PE) C57.12.80-1978r

(3) (rotating machinery) All the numerical values of the electrical and mechanical quantities that signify the demand to be made on a rotating machine by an electric circuit or a mechanism at a given instant. *See also*: direct-current commutating machine.

(PE) [9]

(4) (programming) To place data into internal storage.

(C) [20], [85]

(5) (electric) (electric utilization) The electric power used by devices connected to an electrical generating system. *See also*: generating station.

(PE) [54]

(6) (A) (automatic control) An energy-absorbing device. (B) (automatic control) The material, force, torque, energy, or power applied to or removed from a system or element.

(PE) [3]

(7) (data transmission) A power-consuming device connected to a circuit. One use of the word "load" is to denote a resistor or impedance which replaces some circuit element temporarily or permanently removed. For example, if a filter is disconnected from a line, the line may be artificially ter-

removed. The artificial termination is then called a load or a dummy load.

(PE) 599-1985w

(8) (A) (test, measurement, and diagnostic equipment) To read information from cards or tape into memory. (B) (test, measurement, and diagnostic equipment) Building block or adapter providing a simulation of the normal termination characteristics of a unit under test. (C) (test, measurement, and diagnostic equipment) The effect that the test equipment has on the unit under test or vice versa.

(MIL) [2]

(9) (A) (software) To read machine code into main memory in preparation for execution and, in some cases, to perform address adjustment and linking of modules. *See also*: loader. (B) (software) To copy computer instructions or data from external storage to internal storage or from internal storage to registers. *Contrast*: store. *See also*: fetch; move.

(C) 610.12-1990

(10) (data management) To insert data values into a database that previously contained no data. *Synonym*: populate. *See also*: download; upload.

(C) 610.5-1990

(11) To move the image of a client program from a long-term storage medium (such as a disk) into memory where it may be executed.

(BA/C) 1275-1994

(12) (A) In computer operations, the amount of scheduled work to be performed on a computer system. *See also*: line load. (B) In electronics, the amount of current drawn by a device. *Note*: This determines the "drive strength" of the circuit. *See also*: loading.

(C) 610.10-1994, 610.7-1995

(13) To enter data or programs into storage or working registers. *See also*: mount.

(C) 610.10-1994

(14) Demand or energy.

(PE) 858-1993

(15) The true or apparent power consumed by power utilization equipment performing its normal function.

(PE/SWG) C37.100-1992

**loadability** (of an air switch) The ratio of allowable continuous current at 25°C ambient temperature to rated current. *Note*: Loadability is a measure of the average allowable continuous current over a range of ambient temperatures from 10°C to 40°C for the air surrounding air switches.

(PE/SWG) C37.30-1992, C37.34-1994, C37.37-1996

**loadability factor** (of an air switch) The ratio of allowable continuous current at a given ambient temperature to rated current.

(PE/SWG) C37.37-1996

**Loadable Device (LD)** A station on the network that is capable of accepting a load from a Load Service.

(C/LM) 15802-4-1994

**load&add** A data-access operation that adds a *next* value to a specified data type and returns the previous data value.

(C/MM) 1596.5-1993

**load-and-go** (1) An operating technique in which there are no stops between the loading and execution phases of a program, and which may include assembling or compiling.

(C) [20], [85]

(2) (software) An operating technique in which there are no stops between the loading and execution phases of a computer program.

(C) 610.12-1990

**load angle** (synchronous machines) The angular displacement, at a specified load, of the center line of a field pole from the axis of the armature magnetomotive force pattern.

(PE) [9]

**load-angle curve** (load-angle characteristic) (synchronous machines) A characteristic curve giving the relationship between the rotor displacement angle and the load, for constant values of armature voltage, field current, and power factor.

(PE) [9]

**load balancing reactor** A series connected reactor used to correct the division of current between parallel-connected transformers or circuits which have unequal impedance voltages under steady-state and short-circuit conditions.

(PE) C57.16-1996

**load-band of regulated voltage** (rotating machinery) The band or zone, expressed in percent of the rated value of the